

Panajotis Kondylis

DIE NEUZEITLICHE METAPHYSIKKRITIK

– Klett-Cotta –

PANAGIOTIS KONDYLIS

THE NEW TIMES CRITIQUE OF METAPHYSICS

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My friend Dr. F. Horst read the manuscript and made valuable suggestions regarding the arrangement of the text. He has supported my work with words and deeds for years, and for this, I would like to express my gratitude to him.

Translator's Preface

This is the third Kondylis work I have the pleasure of machine-translating. The usual caution when reading is advised—some mistakes may have slipped in. I will continue machine-translating the rest of his untranslated works, and they will be available online. I do hope we get official translations soon, but for now, enjoy.

~S

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Introduction

During the past hundred years, there have already been several attempts to write the history of metaphysics, which, admittedly, cannot be designated as complete or otherwise flawless.¹ However, so far no history of the critique of metaphysics has been presented, although this critique constitutes a neuralgic point of modern intellectual life. This gap can be explained more easily if one considers that the most prominent modern opponents of metaphysics belong to the so-called analytic direction in philosophy and therefore do not exactly distinguish themselves by the intensity of their interests in the history of philosophy, while, conversely, the direct or indirect heirs and continuators of traditional metaphysical thought recur to the history of philosophy more with apologetic or eclectic than with critical intent. The fact is that there is a history of the critique of metaphysics, and indeed not in the sense of an asymmetrical series of incoherent and scattered attacks against the various versions of metaphysical thought, but rather in the organic sense of the chronological succession or the parallel use of fundamental anti-metaphysical theses, which can be grasped, at least retrospectively, as a multidimensional whole, although each of them only emerged or gained ground under particular

¹ The first histories of metaphysics were not written by chance at the very moment when the rise of the natural and human sciences, as well as the spread of a scientific-positivistic spirit, gave the impression that metaphysics finally belonged to the past. Dilthey, who was no positivist but understood the consequences of the rise of the sciences for the orientation of modern intellectual life as few others did, was the first to set out to sketch a history of metaphysics that would at the same time be a structural analysis and a typology of it (GS, I; cf. below, chap. IV, sec. 4d). By contrast, E. v. Hartmann's somewhat later work is scarcely fruitful; at bottom it contains hardly interconnected summaries of philosophical systems and fails to illuminate the broad lines of development as well as the structural significance of its turning points; the connection to the *Zeitgeist* is established only through the thesis that from now on metaphysics may proceed solely inductively (*Geschichte*, II, 594; cf. below, chap. IV, secs. 2 and 3). Heimsoeth's work, by contrast, arose at a moment when people wished to oppose the spirit of science and help metaphysics to new strength and validity. Accordingly, the author does not really wish to acknowledge the significance and consequences of the fact of modern science, and he strives to refute the supposedly shallow Enlightenment view that the modern age had confronted the Middle Ages and freed man from the fetters of religion and metaphysics; the unity of modernity and the Middle Ages, in his view, reveals itself in the persistence of metaphysical question-forms, which themselves are religiously stamped etc. (*Die sechs großen Themen*, esp. 11 ff.). In reality the book amounts to a rhetorical tract, especially since, from its one-sided professional-philosophical perspective, it scarcely perceives the dynamism of the other currents and forces in intellectual history. Something similar may be said of Schulz's treatise, who likewise does not wish to accept that the modern age brought about a radical rupture or that it placed man in the position of God — even though he admits the transformation of the Christian concept of God (*Der Gott*, esp. 11 f., 55). On more recent attempts to grasp the metaphysical phenomenon structurally and at the same time in its overall historical development by means of sociological and anthropological tools, see below chap. IV, sec. 4c (above all Topitsch).

intellectual-historical conditions. It becomes clear from this that a serious history of the critique of metaphysics must not stop at the doxographical. Just as a history of metaphysics that would deserve the name should proceed to a typology with a systematic claim, so too does a history of the critique of metaphysics see itself faced with the task of arriving at the fundamental types through the study of anti-metaphysical arguments in their conceptual and historical concreteness, which enable the logical structuring of the material and at the same time an all-sided confrontation of metaphysical and anti-metaphysical thought.

One could imagine an (inadequate) history of metaphysics which would orient itself by the main conceptions of the essence of metaphysics or by its threefold Aristotelian definition: then it would have to be investigated when metaphysics was viewed and treated mainly as theology, when as ontology, and when as the theory of principles.² However, such a methodological approach would not be particularly fruitful for a history of the critique of metaphysics, which can only touch upon the problem of a definition of metaphysics to the extent that this appears necessary for its own purposes. Nevertheless, the absence of an unambiguous and generally binding definition of metaphysics by no means implies that the development of anti-metaphysical ideas cannot be traced on the basis of certain conceptual-structural criteria, which formalize the historical material and at the same time can make the great turning points in the course of the critique of metaphysics (more) comprehensible. The question poses itself as follows: which essential characteristics of metaphysics are of immediate significance for the history of the critique of metaphysics? The answer to this question must highlight two aspects. As *content*, every metaphysics rests on the distinction between the transcendent and the immanent, or between the supra-empirical Beyond and the empirical Here [This-World], by understanding the former as "true," unadulterated reality and at the same time (at least in its great traditional forms) as the source of normative principles. As Aristotle indeed writes with classical conciseness, if there were no other substances except those we encounter in empirical nature, then physics would be the first science; the priority, indeed the necessity and the existence of metaphysics itself, is grounded in the conviction that beyond nature there is an immutable substance.³ The hierarchy of Being thus grounds the hierarchy of the levels of

² Since solving this question is not required for our purposes, I refer only to some important publications in which the various views on it are represented: Ando, *Metaphysics*, 8 ff.; Lotz, *Ontologie und Metaphysik*, 4 ff.; Vollrath, *Gliederung*, 271 ff.; Moser, *Metaphysik*, 1 ff.; Zimmermann, *Ontologie oder Metaphysik?*, 101 ff.; Wagner, *Zum Problem*, esp. 141 ff.; Patzig, *"Theologie,"* esp. 190 f., 202 ff.; Mansion, *Philosophie première*, esp. 177 ff.

³ *Metaphysik*, 1526 a 10–23.

knowledge, and the term "metaphysics" reflects this double hierarchy aptly.⁴ As a *form of knowledge*, i.e., as a system of propositions which are connected to one another on the basis of logical rules, and independent of its respective content or the respective definition of the transcendent and the immanent, metaphysics strives for the rational-demonstrative grasping of Being and its ultimate principles. From this view, it is not primarily the nature of Being that comes into consideration, but rather the fact that human intellect, in its highest and most intense effort, can grasp Being and bring it into a contradiction-free system of propositions. Metaphysics thus appears as the tangible proof of the omnipotence of reason.

To be able to comprehend the escalation and the phases of the modern critique of metaphysics, we must now hold fast to the fact that the two characteristics of metaphysical constructs (i.e., the distinction between the transcendent and the immanent as well as the demand for a residual-free rational knowledge of Being) belong together neither logically nor historically, although they are intertwined in many important metaphysical systems of the philosophical tradition. The distinction between the transcendent and the immanent can be conceded without reason being held capable of grasping the former, and vice versa: one can continue to believe in the epistemic omnipotence of reason even after the elimination of the aforementioned distinction (as we know it from tradition).⁵ The following analysis of the historical material will prove the fruitfulness of these elementary conceptual differentiations. And indeed, the modern polemic against metaphysics exhibits two logically distinct, albeit temporally often interlaced, aspects. On the one hand, metaphysics is rejected as complete rational knowledge, i.e., as the attainment of ultimate truths through the means of reason; on the other hand, the metaphysical distinction between the transcendent and the immanent is relativized or abolished. This latter and by far more radical form of the critique of metaphysics takes shape considerably later than the former, i.e., it is first articulated openly and systematically by the materialism of the 18th century, although it was prepared by the pantheistic tendencies of the natural philosophy of the Renaissance and by Spinozism. However, the modern struggle against metaphysics begins with

⁴ Reiner has convincingly shown that the term *Metaphysik*, which is well known not to appear in Aristotle himself, was not created by Andronicus out of merely biblionomic reasons, as the dominant tradition (especially since the 19th century) claims; rather, it already arose in the circles of the older Peripatetics, namely in connection with a particular didactic arrangement of the philosophical disciplines that went back to Aristotle and corresponded to the content — that is, to the ontological hierarchy — of Aristotelian philosophy (*Die Entstehung*, esp. 228 ff.).

⁵ In this case the term *Metaphysik* acquires an epistemological and gnoseological meaning (as indeed became customary since Bacon, cf. below chap. II, 8; III, 3; IV, 3) and denotes the last, or rather first, principles upon which all knowledge must rest. The distinction between "beyond" and "on this side" no longer refers to the essential difference of ontological levels from one another, but results from the contrast between the supra-empirical character of those principles and merely empirical cognition; the intelligible "beyond" is thus here the ensemble of logical or mathematical relations which, as it were, support empirical appearances.

the questioning or the direct rejection of the knowledge claims of metaphysical reason, thus with the fundamental denial of the possibility of metaphysics as complete rational knowledge of Being. Since the rejection of metaphysics in this sense touched upon the distinction between the Beyond and This-World, which was central to the ideologically dominant Christian view, the critique of metaphysics of the early modern period turned out to be ambivalent, for the innovative profane tendencies intersected in its framework frequently with the reaction of broad theological circles against the Thomistic marriage of theology and metaphysics, faith and reason—a reaction that drew its strength from the Augustinian tradition and took the form of Nominalism, only to announce itself anew in Lutheranism.

The modern critique of metaphysics thus begins with the curtailment of the cognitive capacity of reason with regard to ultimate truths, i.e., the rational grasping of the transcendent. This process is complicated and contradictory because both theologians, who see a danger to faith in the mixing of reason and faith, and pioneers of modern rationalism, who under the circumstances of the ideological omnipotence and omnipresence of religion and church do not dare (and do not even think) to take the Beyond under fire, advocate for this curtailment; they therefore attempt to make it [the Beyond] practically irrelevant: if the Beyond cannot be grasped rationally, then reason should rather turn to the Here [This-World], to physical and human reality. Agnosticism, which in the early modern period provides the most powerful theoretical weapons for combating metaphysics, can thus be of theological-fideistic as well as profane-skeptical descent, without this ambiguity always being conscious to those involved. An important step in the history of anti-metaphysical thought is taken at the moment when the two types of agnosticism separate from one another to place themselves in the service of two fundamentally different worldview stances: theological agnosticism combats metaphysics as rational knowledge in order to preserve God and faith from the corrosive effect of reason and rational argumentation, while profane agnosticism asserts the impossibility of rational knowledge of Being or God not with the intention of keeping faith intact, but on the contrary, to decouple rational knowledge from faith once and for all and to make it independent, by declaring the Here [This-World] and the empirical world to be its exclusive object and field of activity. Despite the radical contrast that came to light in the orientation and function of the two types of agnosticism, the representatives of profane anti-metaphysical agnosticism continued to gladly and frequently appeal to their (negative) agreement with the theological rejection of metaphysics as rational knowledge, since they saw in it an alibi that could protect them against the attacks of the still (almost) all-powerful Church.

The rise of mathematical natural science at the beginning of the 17th century strongly promoted the divergence of the two types of agnosticism. By opposing the scholastic-Aristotelian worldview with a radically new and no less complete one, mathematical natural science forced

theological and religious positions onto the defensive and compelled them to mistrust views that might have appeared harmless or even legitimate in earlier times but now had to assume a different character. From the perspective of our inquiry, the essential contribution of mathematical natural science consists in the ontological upgrading of the sensible world. While in the framework of classical antique-Christian metaphysics this [the sensible world] was considered ontologically inferior, i.e., irrational or contingent in its structure and therefore (in contrast to the sphere of transcendent spirit) inaccessible to a purely intellectual grasp, it now appears as a coherent system of lawful relations capable of a logical-mathematical interpretation and precisely for this reason constituting the object not merely of a science that must stand below metaphysics, but of science *par excellence*—provided only that the word "science" is understood in the modern sense. In this way, the ontological questioning is displaced by the methodological one, and the search for the *certitudo modi procedendi* [certainty of the method of proceeding] eclipses the traditional primacy of the *certitudo objecti* [certainty of the object]. At the same time, mathematical natural science unified the worldview and subjected it completely to a single lawfulness; the elimination of the Aristotelian division of the cosmos into a heavenly and a sublunary region, in which alone there was motion and decay, withdrew, so to speak, the cosmological correspondence or support from the metaphysical distinction between the Beyond and the Here [This-World]. If no metaphysics can be conceived without a specific hierarchy of ontological levels, then mathematical natural science was expressly anti-metaphysical in the sense that it toppled the traditional hierarchy of substances, which served not merely classificatory but downright normative purposes, with one blow, or at least drastically simplified it. The mathematization or quantification of nature, which was opposed to the scholastic-Aristotelian qualitative way of viewing things, implied, however, the separation of the properties of natural bodies into primary (i.e., supra-empirical and mathematically graspable) and secondary (i.e., empirical and incapable of a complete mathematical grasping). This seemed to call the classical metaphysical distinction between substance and its accidents back to life, albeit this time in a significantly different perspective. Thus, it came about that precisely at the moment when mathematical natural science put metaphysics out of action as a rational science of Being, a novel metaphysics arose which revolved around the problem of substance, which predominated in the metaphysical constructions of the 17th century. Nevertheless, it would be an optical illusion to think that "the" metaphysics simply continued its royal path and remained untouched in its essence by the newer developments. Quite the opposite has been the case. Not only were its questions reformulated in the light of the problematics of mathematical natural science, but its concepts were also structured according to natural-scientific models; in most cases, moreover, the new primacy of epistemology explicitly or implicitly replaced the traditional primacy of ontology. For these reasons, and although the works of a Malebranche or Leibniz do not in themselves constitute contributions to the critique

of metaphysics, the history of this latter must nonetheless deal with certain aspects of them: the crisis of metaphysics is inseparably connected with the critique of metaphysics.

Already in the 17th century, then, the essential difference between traditional philosophical thought and modern [thought] becomes visible. While in the former the *metaphysical problem* in the sense of the investigation of the being of beings stood in the center, the latter grapples with the *problem of metaphysics*, and indeed often in the sense of a (radical) doubt regarding the expediency and usefulness of that investigation.⁶ In the Age of Enlightenment—and if we disregard some philosophical constructions like the Wolffian one, which rather creates the impression of an antediluvian monster—the time-honored question about the being as being hardly poses itself, and the concept of substance, which had still occupied Locke so intensively, falls completely into the background after Berkeley's and Hume's objections. The philosophical literature of the Enlightenment generally devotes considerably less space to the critique of the fundamental concepts of scholastic-Aristotelian logic and metaphysics than the anti-metaphysical literature of the 15th or 16th century, and the reason for this is certainly not the respect of the Enlighteners for the mentioned concepts—on the contrary: these are considered so empty of content and senseless that hardly anyone feels compelled to deal with them seriously. Instead, the Enlighteners do something else: if they do not polemicize openly against metaphysics, then they withdraw its traditional sense from its concept and interpret it according to the new primacy of epistemology over ontology, whereby metaphysics is reduced to gnoseology or epistemology. This development occurs, in turn, within the framework of an intensification of the anti-metaphysical struggle unheard of until then, i.e., the first massive, open, and programmatic rejection of the distinction between the Transcendent and the Immanent in all its Christian and pre-Christian variations.

The elimination of the Transcendent, the cornerstone of every metaphysics, was accompanied by the emergence of new types of critique of metaphysics. From the 14th to the 16th century, when metaphysics was rejected from the standpoint of the theological or profane denial of the possibility of a rational knowledge of Being, two basic types of critique of metaphysics were used. The first of these was of an epistemological nature and rested on the demonstration of the limits of human reason, which must rely on uncertain, incomplete, or even deceptive sense data and therefore can neither attain ultimate certainties nor decisively expand its horizon—unless with the help of divine illumination. Epistemological empiricism did not always serve a profane-this-worldly worldview attitude here, as happened as a rule in the 18th century, but it went hand in hand with the theological doctrine of the Fall and the limitation or darkening of human reason tracing back to it, which could be overcome only through faith and not, for instance, through rational metaphysical knowledge. After the rediscovery of Sextus and Cicero

⁶ According to a formulation by Faggiotto, *Problema*, 15.

(*Academicae Quaestiones*) in the 16th century, the leitmotif of the limits of human reason in its dependence on unreliable sense data is translated into profane language and incorporated into profane-anti-theological skepticism. In the second main type of early modern critique of metaphysics, the weight is laid, in turn, on language, and attempts to work out a metaphysics are denounced as abuse of innate logical defects of language or as a violation of its rules. This type takes shape at the time when the humanist movement rediscovers ancient rhetoric and opposes it to logic and dialectic; rhetoric is understood here in the broad sense of knowledge of the rules of human communication within the framework of social life and by means of the medium of language, which therefore encounters special and systematic interest. This old origin of the critique of metaphysics as a critique of the language of the same must be particularly emphasized, especially in view of the widely held view today that this type of critique of metaphysics would only properly begin with the so-called analytic philosophy of our century.

In the Age of Enlightenment, these two earlier types of modern critique of metaphysics now retain their strength undiminished; agnosticism still serves in the sense explained above as an alibi vis-à-vis theology, and the phenomenon of language likewise stands in the center of philosophical attention, although this time, of course, under a new aspect, namely in the attempt to construct a satisfactory empiricist epistemology, which was intended to explain the critical transition from sense data to higher thought operations also by means of the gradual formation of an increasingly complicated linguistic sign system; metaphysics is here again dismissed as the illegitimate result of the defects of language or as a violation of its rules. Nevertheless, the radical approach to eliminating the metaphysical distinction between the Beyond and the Here had to bring new and more radical types of critique of metaphysics to life. From the moment the decision falls to eliminate (traditional) transcendence, the main anti-metaphysical task no longer consists in demonstrating the inability of metaphysics to grasp this transcendence rationally, but rather in making it comprehensible that and how such a great delusion as the separation between the Transcendent and the Immanent could have come about at all. A twofold explanation is offered for this, which produces two new types of critique of metaphysics.

We can call the first of these the historical-sociological [type] and regard it as the product of the intersection of two important and characteristic aspects of Enlightenment thought, i.e., the critique of Christianity and at the same time the formation of a novel historiography, oriented not merely politically but rather sociologically, from whose womb the modern concept of "ideology" (as false consciousness reflecting social life conditions in a distorted way and at the same time rationalizing and legitimizing claims to rule) finally resulted. The critique of Christianity, which could often pass over into a critique of religion in general, made clear both the religious roots and traits of metaphysics as well as its interlacing with religiously sanctioned

forms of rule; understood in this way, metaphysics appeared as mere philosophical processing of religious imaginings, which stemmed from dark passions and even darker prejudices, yet gradually had to assume and keep the form of a system of ideas because they fulfilled a social function by blessing the rule of the one [group] and sweetening the submission of the other through all kinds of consolation. From these findings, it was concluded that the metaphysical delusion could not last longer than its causes, that it would thus necessarily disappear after the universal maturation of human reason and after social emancipation.

Precisely at this point, the second of the two new types of critique of metaphysics, which we want to call the anthropological to distinguish it from the just-mentioned historical-sociological one, deviates from this. Here too, metaphysics appears not as reliable rational grasping of Being, but as the outflow of certain deeper needs of human nature—needs of a cognitive as well as a volitional and normative character. But quite independently of whether metaphysics roots in the irrational and consists in delusions, it will remain alive and socially effective as long as human nature and its needs do not change.

When the Age of Enlightenment reached its conclusion, all four main types of critique of metaphysics as we know them today had thus more or less taken shape: the epistemological, the linguistic, the historical-sociological, and the anthropological. Contrary to a widespread impression, we must here draw attention to the fact that the critique of metaphysics in the 19th and 20th centuries has not substantially enriched the anti-metaphysical yield of the four or five preceding centuries; the mentioned, already established main types merely experience various modifications or deepenings. The epistemological critique was varied and enriched on the part of the positivists and some scientifically oriented philosophers as well as the representatives of the Neo-Kantian direction; the historical-sociological analysis of metaphysical thought structures was driven further and refined by the spectacular development of the corresponding sciences; the working out of the logical defects of the language of metaphysics has been above all the work of so-called analytic philosophy; and the anthropological consideration of metaphysics found in Schopenhauer, Nietzsche, and Dilthey its authoritative modern exponents, despite essential substantive differences in their respective approaches.

With regard to the 19th and 20th centuries, however, it is not so much a matter of understandingly tracing the modifications and deepenings of intellectually-historically pre-given leitmotifs, but rather of an explanation of the reasons why the struggle against metaphysics has assumed such an extent and such intensity precisely at a time when metaphysics, after centuries-long attacks against it and after one had brought forward all possible arguments against its content and its form in the past, already seemed to lie dying. It would be a mistake to think the harsh tones one found against metaphysics in the 19th and 20th

centuries constituted the irritated answer to a new great creative phase in the history of metaphysics. Attempts at a revival and renewal of metaphysics have certainly by no means been lacking in the mentioned period; but if we do not view things in the narrow perspective of professional philosophers, but overlook the intellectual-historical overall development, then we must designate them as storms in a teacup. The genuinely metaphysical aspect of Hegel's system practically did not survive the philosopher; English Hegelianism was an intellectual game of a few aristocrats of the spirit and would have remained unnoticed had it not drawn the polemical attention of pioneers of analytic philosophy, while the metaphysical moments that surface in Kierkegaard, Heidegger, or Jaspers could become effective not independently, but only in their interweaving with the strong anthropological direction of Lebensphilosophie [philosophy of life] and phenomenology.

If metaphysics had actually already lost its old status and largely also its ability to renew itself, how then is the vehemence of the critique of metaphysics in the 19th and 20th centuries to be explained? The astonishing rise of natural science, technology, and industry in the course of the 19th century was initially borne by a confidence in the capabilities of the this-worldly oriented human spirit and in the historical future, the extent of which is difficult to imagine today; this attitude often sought its own worldview confirmation in the spectacular overthrowing of an already bleeding enemy, who was attacked all the more frequently the more certain victory appeared. Certainly, the ideological reorganization of the socio-political "Reaction" after 1789 and especially after 1815 had favored the revival of metaphysical tendencies (here belong not only certain aspects of German Idealism, but also the Romantic aestheticization of Christian metaphysics, whereby its traditional content and sense were partly diluted, partly abandoned), so that the victory of modern rationalism over metaphysics had to repeat itself in miniature or [repeat] the game of centuries in decades; in doing so, the impression arose that this was a new struggle and not merely the final phase of an old struggle. The rapid substantive expansion of the natural and social sciences for its part offered the anti-metaphysical struggle so many arguments that the feeling of a path-breaking new beginning could not fail to appear.

The inability of traditional metaphysics to renew itself substantially under these circumstances did not *eo ipso* bring about its death. Its elimination could not be complete at least as long as that continued to live and still unfolded social effect which we can call "folk metaphysics," i.e., religion; the significance of the survival of folk metaphysics for non- or less popular metaphysics showed itself, incidentally, in the rise of currents such as, e.g., Neo-Thomism. This tenacious persistence of traditional metaphysics lies ultimately in the moral-normative functions of the fundamental distinction between the (spiritual) Beyond and the (sensible) Here: as is known, the sphere of the (divine and of the human spirit manifoldly related to and interlaced with it) spirit constituted in the metaphysical tradition the carrier and guarantor of

moral-normative principles.⁷ If we visualize how obvious and necessary the relationship of spirit and norm was in the eyes of the overwhelming majority of people even two centuries ago, then we can more easily explain the longevity of (folk) metaphysics to ourselves. Due to the original interweaving of ethics and metaphysics, the metaphysical sanctioning of norms and values also had to suffer least and last as a result of the collapse of the ideological monopoly of religion.

The organic unity of ethics and metaphysics sprang from the need of the former to ground its respective commandments "objectively," by not merely appealing to the rectitude and the insight of the acting persons, but by appealing to the nature of Being; only an ethics that agrees with the eternal and immutable laws of true reality, as these laws disclose themselves to the metaphysical grasping of Being, can present itself as objective and binding. Nevertheless—and this is a point of decisive significance for the fates of metaphysics no longer as content but as conceptual structure—representatives of modern rationalism have wanted to lend their own ethical norms and values the same highest objectivity and bindingness that was claimed by those of traditional metaphysics. This constituted an effective weapon in the ideological struggle, but the price for it was the unconscious appropriation of fundamental structures of traditional metaphysics. In order to be able to set up a Beyond that would be capable of fulfilling ethical-normative functions, the representatives of modern (anti-metaphysical!) rationalism had to take refuge in concepts such as Nature, Man, Reason, or History, which contained a supra-empirical aspect, in the light of which their empirical component was seen and evaluated; the goal remained here too the subjection of the empirical to the supra-empirical, e.g., the adaptation of the behavior and the way of thinking of the empirical man to the commandments of the Idea of Man or of a supra-individual Reason or the shaping of individual human actions in accordance with the course and meaning of Nature or of History.⁸ Precisely because the mentioned central concepts of New Times rationalism absorbed essential structural characteristics of traditional metaphysics, they drew the fire of modern anti-metaphysical directions, such as, e.g., so-called critical rationalism; the apparent paradox thus occurs that modern opponents of metaphysics combat not so much the traditional forms of the same, but rather those that were often opposed to the traditional ones with anti-theological intent. The paradox clears up if we consider which socio-political structures were ideologically legitimized by slogans like Man or History and which, on the contrary, are the socio-political options of the opponents of such slogans. Namely, to the extent that the struggle between "open" and "closed" society stepped into the place of the old struggle between feudal-absolutist and bourgeois-liberal order, secularized metaphysics as ideology of a closed society also became the

⁷ On the ethical-normative function of the concept of Geist in the philosophical tradition see Kondylis, *Aufklärung*, 19 ff.

⁸ A.a.O., esp. 58 ff., 342 ff.

main enemy of liberal critique of metaphysics. But the struggle of the defenders of the open society against "totalitarianism" must also be waged in the name of certain values (freedom, humanity, human rights, etc.), which just like all other values also represent products of supra-empirical worldview decisions. This speaks for the assumption that certain fundamental metaphysical thought structures, independent of the extent of their secularization, will continue to exist as long as humans set up and advocate moral-normative principles.

The secularization of metaphysics has not been the only form in which it has survived—alongside the massive remnants of its traditional versions. It has also happened that entire circles of ideas, which originally arose in the womb of traditional metaphysics and belonged organically to it, have detached themselves from it and propagated in areas of philosophy that were actually considered new creations and characteristic thought approaches of modern rationalism. I would like to mention here an example that, despite its far-reaching significance, has not yet been duly noted. It concerns the origin of central quantities of modern epistemology, a philosophical discipline, namely, which successfully contested the conventional precedence of ontology and thus seemed to virtually embody the enforcement of anti-metaphysical priorities in the field of modern philosophy. As is known, a main task of modern epistemology has consisted in delimiting the competencies of intellect and sensibility and explaining their relationships to one another plausibly—often by means of subdivisions of these two central cognitive faculties. The view that the Ego forms a hierarchy of faculties dominated by the (pure) intellect is, however, originally not an empirical discovery, but it took shape already within the framework of traditional metaphysics and constituted at bottom a projection of the dualism of spirit and matter, decisive for this latter, into man himself. The first hierarchization of cognitive faculties worked out philosophically in this sense, as we encounter it in Plato⁹, rested expressly on a correspondence to the hierarchy of ontological levels. The "Copernican turn" of the modern age removed the primacy of ontology and loosened the human spirit from its previously assumed metaphysical sources, but the hierarchical structure of knowledge and of the Ego, copied from the metaphysical pattern, remained largely unchanged. The reason was in this case too, not least, the fear of the moral-normative consequences of an abolition of the free "spirit" independent of the sensible.

This introduction into some central motifs and aspects of the modern critique of metaphysics constitutes at the same time a simplifying summary of our work, and therefore it is unnecessary to set out our program specifically. We want to attempt to present the history and typology of the modern critique of metaphysics as briefly as possible and in doing so to pay special attention to less noted or overlooked connections, such as, e.g., the relationship of the humanist movement to metaphysics or its new definition in the Age of Enlightenment—a definition,

⁹ *Politeia* 476 a–480 a as well as 509 c–511 c.

incidentally, which has become highly topical again in our days. However, important turns and phases of modern philosophy and intellectual history are connected very closely with the history of the critique of metaphysics, so that the satisfactory treatment of the subject apparently had to encompass widely separated questions such as the early formation of the scientific method, the restructuring of scholastic metaphysics in the 17th century, or the character of philosophemes of the 20th century. The multidimensionality of a subject has always been a chance and at the same time a danger; hopefully, the chance was used well here and the danger survived with minimal losses.

**I. Nominalism, Humanism and the Critique of Aristotelian Logic and Metaphysics from the
14th to the 16th Century**

1. The Problem of Rational Metaphysical Knowledge in Medieval Theology and the General Character of Nominalism

The metaphysical questioning in medieval theology does not revolve around the distinction between the Beyond [Jenseits] and This-World [Diesseits], since the reality of this distinction is accepted without further ado in the Christian perspective, but rather around the problem of whether metaphysics is possible as rational knowledge and, if so, whether God or Being as the most general determination constitutes its object.¹⁰ Here, only the first aspect of this double problem interests us; the second will occupy us later when we discuss the separation of *metaphysica generalis* and *metaphysica specialis* from one another in the 17th century.¹¹ Our ambition in treating the question of rational knowledge in medieval theology is again not the enrichment of the almost unsurveyable literature on the subject with substantially new data and interpretations, but rather such a reconstruction of previous research results that the often forgotten or misjudged connection between the older theological problematics and the origins of modern-profane critique of metaphysics becomes clear and conscious.

The dispute over the relationships between faith and knowledge or between Christian and philosophical truth has, as is known, accompanied the theoretical formation of Christian doctrine from the beginning and never came to an end. Although the efforts of Christians for a positive evaluation and use of pagan philosophy still persisted in the 6th century, the Augustinian view, according to which knowledge, insofar as it is attainable and desirable at all, can and may only represent a rationalization of faith, prevailed early on and had a decisive effect in the following centuries.¹² In earlier and later scholastic theology, however, the question of the relationships between faith and knowledge posed itself significantly differently than in the first Christian centuries. The point of contention was now not so much whether and how individual insights of pagan philosophers were to be utilized in the Christian-theological framework, but rather the extent to which theology, as an all-sided and coherent system of divine truths, could and should make use of a philosophical technique and method for their adequate formulation, the extent to which it thus could and should become rational demonstrative knowledge. The transformation of theology into an organized *scientia* began already in the Carolingian period, when rhetoric, grammar, and dialectic were used for the first time for the purpose of better understanding the biblical text; it continued in the 11th and 12th centuries, when the content of articles of faith was poured into the language of metaphysics and

¹⁰ On the complicated question of the definition of the object of metaphysics in late medieval theology, see the excellent work by Zimmermann, *Ontologie oder Metaphysik?*, passim.

¹¹ cf. below, chap. II, 6.

¹² See generally the treatise by Grabmann, "Augustins Lehre von Glauben und Wissen und ihr Einfluß auf das mittelalterliche Denken" in *Mittelalterliches Geistesleben*, II, 35–62.

logic or dialectic; and it culminated in the 13th century, when Bonaventure grappled with the question of the scientific organization of theology in its entire extent and in all its technical implications; this change of theology in the sense of an independent *scientia* was outwardly characterized by the fact that theological expositions and commentaries now served not the biblical texts, but the *Sententiae* of Peter Lombard as a basis.¹³

The use of metaphysics and dialectic in the field of theology entailed important consequences, initially regarding the form. By means of metaphysical conceptualization, the general architectural framework was established into which the individual problems and propositions were then ordered, whereby they received their theoretical status; the logical instruments of dialectic (i.e., the definitions, the distinctions, the corollaries, etc.) joined the members of this systematic world of thought together in a clear and solid manner.¹⁴ The radical formal reshaping of theology was certainly not undertaken with the intention of modifying the traditional contents somehow, let alone undermining them; on the contrary, this was an attempt to consolidate faith with the help of reason on the basis of the principles *fides quaerens intellectum* [faith seeking understanding] and *credo ut intelligam* [I believe so that I may understand]. The fundamental Augustinian view of the relationships between faith and knowledge remained, in other words, unchanged; the *certitudo fidei* [certainty of faith] continued to rest on the threefold *auctoritas* of the Bible, the Church Fathers, and the Church, and the rational processing of the articles of faith was intended to be *fidei ratio* or *fidei intellectus*, i.e., reason that proceeded from faith in order to confirm this same faith for its part. *Auctoritas* and *ratio* as the two pillars of methodical scholastic theology also appear in Thomas [Aquinas], specifically in the form of the thesis that the former guarantees from the outset the truth of those articles of faith which the latter then grounds in detail.¹⁵ Nevertheless—and although theology as *scientia* did not want to harm *auctoritas*—the introduction of a rational method in the treatment of questions of faith called considerable difficulties and correspondingly vehement reactions into being. For to what extent can discursive reason penetrate into the essence of Revelation without disfiguring it? If reason is capable of exhausting the essence and content of Revelation, what then is the need for revealed religion and those institutions whose (self-imposed) task consists in the binding interpretation of its mysteries? If, conversely, reason must fail before the depths of Revelation anyway, why should one engage in the game with its artifices and sophisms at all, which, once begun, perhaps cannot be ended in time and at will? It is therefore obvious what worries the

¹³ The stages of this development are described by Chenu, *Théologie comme science*, 14 ff., 37 ff.; on Bonaventura, 53 ff.

¹⁴ Grabmann, *Geschichte*, I, 322 f.

¹⁵ Ibid., 33, 35. The Thomistic view, important for our line of questioning, regarding theology as *scientia* as well as the relationship between *lumen fidei* and *intellectus principiorum* is summarized by Chenu (*Théologie comme science*, 64 ff., 71 ff.).

loud polemic of broad theological circles against the introduction of metaphysics and dialectic (as forms of rational knowledge) into the realm of theology has evoked already since the 11th century.¹⁶ Earlier scholastic theology has a remarkable variety of views to show on this critical question, and if in the Scholasticism of the 13th century the assumption of the harmony between theology and ("true") philosophy seemed to prevail at least temporarily, the differences of opinion regarding the determination of the relationships between supernatural and natural knowledge as well as regarding the essence of knowledge in general by no means disappeared.¹⁷

If we understand the development of Scholasticism as a constant conflict of different directions which found themselves in a tense equilibrium and only temporarily had to leave the precedence to one among them, then we should also bid farewell to the widespread—and especially popular among Thomistically minded historians—view that this development culminated quasi with logical inevitability in the Thomistic harmonization of faith and knowledge (specifically through the grounding of faith by means of a metaphysics as rational knowledge of Being), only to lose its way hopelessly after the dissolution of the Thomistic synthesis.¹⁸ In reality, Thomism was neither the necessary outflow or peak of the preceding theology nor the only possible complete theological system, but the concrete answer of a genial theologian to concrete questions of that historical moment; and if it became the quasi-official church doctrine in later times, this was again due to concrete historical reasons, namely to the fact that the Roman Church wanted to support the *fidei ratio* fundamentally against the fideistic irrationalism of Lutheranism and the just-swelling profane agnosticism. Thomism upgraded rational knowledge—and thus also its highest form, namely metaphysics—in its endeavor to conquer Arabian Aristotelianism theoretically, since it saw itself confronted here with an opponent for whom Christian Revelation meant nothing and proved nothing from the outset. Thomas recognized that philosophical truth, which procured increasing autonomy for itself under Arabian influence even at Christian universities, could be brought under control only through its interlacing with articles of faith within an expanded framework; the separation of theology and philosophy would, under the given circumstances, merely grant the latter more independence. This strategy met with little understanding among authoritative theological circles, precisely because of the traditionally anti-metaphysical and anti-philosophical attitude of theology, which incidentally saw no reason to take philosophy seriously as long as it had no

¹⁶ The necessary information on this can be found in Grabmann, *Geschichte*, II, 111 ff.

¹⁷ Betzendörfer, *Glauben und Wissen*, 88 ff., 248 ff.

¹⁸ Moody opposes this schematic view of the development of medieval philosophy (*Empiricism and Metaphysics in Medieval Philosophy Studies*, 287 ff.) with good arguments; he also emphasizes the orthodox Christian origin of the anti-metaphysical and simultaneously anti-Thomistic theological currents of the 14th century.

philosophers as opponents. Such [opponents] appeared only with Arabian Aristotelianism, against which the anti-Thomistic continuators of the Augustinian tradition wanted to hold not some systematic combination of philosophy and theology, but the view of the limits of human reason and knowledge *in statu isto* [in this state], i.e., after the Fall. The denial of the possibility of a metaphysics as rational knowledge of Being connected with this implied, for its part, the rejection of intellectualism and the acceptance of an epistemological empiricism which aimed to withdraw the truth of faith from the control of human knowledge, which is reliant on empiricism and therefore necessarily limited (how strong this motive was in the theological thought of the time is shown by its use by Thomas himself). The interaction of all these ideas and motives now gives us the key to better understand the general character and the anti-metaphysical point of the nominalist current.

Here too we must first clear up some widespread misunderstandings. One such is the just-mentioned (Neo-Thomistic) evaluation of the theology of the 14th century as a more or less backward-looking tendency or even a phenomenon of decadence. A second, which stems from the mythological genealogy of 19th-century Positivism and still operates today, sees in Nominalism a precursor of the modern "scientific-experimental spirit,"¹⁹ whereby the retrospective effect of certain nominalist positions is confused with the genetic reasons and intentions of the great representatives of Nominalism. Contrary to these interpretations, the research of recent decades²⁰ has not only worked out the internal differentiation of the nominalist movement but also shown²¹ that the common denominator of the various nominalist directions is to be sought in certain theological, and not, for instance, logical or epistemological theses. Central to this is the thesis of the absolute power of God (*potentia absoluta*), which is bound to no natural, logical, or moral law and therefore differs from the so-called ordained power of God (*potentia ordinata*), which manifests itself in the order of nature and the generally recognized logical and moral laws.²² This distinction was not new in Christian theology, but in the 14th century, it was emphasized because it turned against the Arab-Aristotelian binding of God to a necessity which was even stronger than God himself; thus, a different argumentative

¹⁹ This positivist assessment of Nominalism has found resonance, for example, with Lange (*Geschichte*, I, 241 ff.). Also in Marxist-Leninist history of philosophy, which pays homage to the schema of the perpetual struggle between idealistic and materialistic directions and therefore can hardly explain the phenomenon of a theologically motivated empiricism, Nominalism appears as a precursor or ally of materialism; see, e.g., Trachtenberg, *William of Occam*, esp. 222. The author (219) is surprised because Occam rejects the theory of the species and instead speaks of signa and inclines toward phenomenalism—while ironically Thomas is close to the sensualist standpoint on this question. Such paradoxes, however, do not force him to revise his dogmatic view.

²⁰ On this in summary, Courtenay, *Nominalism* (esp. the first two parts of the treatise).

²¹ On the various tendencies within the nominalist movement, see Oberman, *Some Notes*, 54 f., as well as Courtenay, *Nominalism*, 51 ff.

²² Oberman, *Some Notes*, 56 f., 60 f.

strategy than the Thomistic one could be adopted against Arabian Aristotelianism, which at the same time was directed against the Thomistic attempt at a fusion of metaphysics and theology. As a result of placing God's *potentia absoluta* before his *potentia ordinata*, the fact that God created the world known to us and the laws known to us was no longer considered decisive, but rather his ability to create a completely different world and completely different laws; our world and our logical or moral laws are accordingly not necessary in the absolute sense, but in them the *contingentia* of creation expresses itself—as the result of the uncontrollable and inscrutable, *ergo* potentially endlessly changeable divine will.²³ The concept of *contingentia* had some obvious dangerous consequences, especially in its application to moral categories; the gap that seemed to open up here between the omnipotence and the morality of God called forth many worries and corresponding differentiations within the nominalist movement. The view of the *contingentia* of the world gained ground, however, not only because it corresponded to central existential and social experiences of the 14th century (shattering of the at least theoretically unified *res publica christiana* through the emergence of national power centers and the humiliation of the Papacy in Avignon, massive peasant revolts, the terrible event of the Black Death), but also because it seemed to secure Christian theology effectively against the theoretical threat by the Arab-Aristotelian doctrines on the eternity of the world, *ex nihilo nihil fit* [nothing comes from nothing], etc., which set visible limits to God's omnipotence. If *contingentia* gave rise to uncertainties in the field of nature, logic, and morality, it on the other hand instilled unshakable trust in the direction of world events by God's will.²⁴ The denial of natural causality, as it was assumed in the Thomistic system in the form of *causae secundae* [secondary causes], on the part of leading Nominalists reminds one indeed of Hume and thus seems to be a harbinger of modern philosophy; in reality, however, it was merely intended to provide the proof that the only sure cause of natural phenomena in detail and in their totality can be God and no other than God.²⁵

Let us now consider the consequences of these theological principles for metaphysics as rational knowledge of Being. The *contingentia* of the world means that this world does not represent an incarnation of an eternal, recognizable, and calculable-in-advance necessary order, which would be the immediate and unexchangeable outflow of divine wisdom. Precisely the assumption of such an order permitted, according to scholastic-Aristotelian understanding, the establishment

²³ Leff, *Heresy*, I, 294 ff.

²⁴ Leff, *Gregory*, 22; cf. 130 ff. on Gregory's rejection of the principles of sufficient reason and contradiction with the intention of fighting the mentioned doctrines of Arab Aristotelianism. See also the remarks by Rice, *Renaissance Idea of Wisdom*, 19 ff., on the *coincidentia oppositorum* in Nicolaus Cusanus.

²⁵ Weinberg, *Nicolaus*, 49, 66 f. Weinberg highlights Nicolaus' opposition to Arab Aristotelianism (87 ff., 92 f., 96 ff.) and claims against Lappe that Nicolaus would not have attributed every single phenomenon to the immediate action of God; Lappe (*Nicolaus*, 24) meant, however, only that this would be the unspoken ultimate consequence of Nicolaus' position.

of that hierarchy of substances which, so to speak, provided the backbone of Being as it was grasped and represented in the metaphysical framework. However, the grasping of every single substance as well as of the connection formed by all substances presupposed the transition from the empirical to the intelligible by means of the system of categories. From the moment when the divine *potentia absoluta* and the resulting *contingentia* of creation ruined the idea of the recognizable, intelligible order of substances, a transcending of the limits of merely empirical knowledge could also no longer be held possible: metaphysics became unattainable. The unbridgeable gap between God and creation took the form of the incurable discrepancy between contingent and necessary knowledge.²⁶ Among other things, a proof of God was renounced that would have to be delivered on the basis of the construction of a chain of causes or intelligible substances abstracted from the mental processing of sense data. Theology as *scientia* thus becomes just as impossible as metaphysics as rational knowledge of Being. By Occam partly receiving, partly varying or reversing positions of Duns Scotus²⁷, he places theology not as *scientia* but as soteriology above metaphysics, denying both the ability for the highest rational knowledge. Since immediate and sure human knowledge is empirical, while our concepts are derived and composite, a mental grasping of the divine essence in itself and in its simplicity cannot come into consideration;²⁸ theology can accordingly not be theoretical knowledge, which must remain inaccessible to man *in statu isto* anyway, but it concerns everything that has to do with salvation and lies beyond human cognitive faculty.²⁹ The object of metaphysics is Being with regard to generality and God with regard to perfection; but since metaphysics, in contrast to physics, wants to know not the effects of God in the sensible world, but his essence, it likewise hits upon the limits of human, empirically conditioned knowledge, and only approximately is it able to grasp the determinations of the divine nature in its uniformity.³⁰

²⁶ Leff, *Gregory*, 23.

²⁷ Scotus also sees an essential difference between (philosophical) metaphysics and theology in that the former binds God to necessity, while the latter assumes his freedom. Philosophy can therefore only render some service to theology by providing concepts, etc.; the similarity of the object is only apparent here, since theology does not deal with being in general in the manner of metaphysics, but only with infinite and perfect being; see Schmaus, *Metaphysik*, esp. 38 f., 42 ff.

²⁸ *I Sent.*, prol., q. 9, ZDD.

²⁹ *I Sent.*, prol., q. 9, CC. In detail on Occam's denial of the scientific character of theology, Guelluy, *Philosophie et Théologie*, esp. 221 ff., cf. 266 ff.

³⁰ *Expositio super Physicam Aristotelis*, Berlin cod. elect. 974, fol. 86 b, 120 a = Baudry, *Lexique*, 151, 152. Boehner, who wants to discover a metaphysics in Occam, does so by withdrawing its traditional content from this term. Occam, he opines, believes in the reality of the world as well as in the order prevailing in it, therefore he is also convinced that there are concepts that go beyond individual things and can grasp the mentioned order as a whole, although they have only logical existence; Platonic ideas as well as moderate Aristotelian Platonism have no place here, especially since *essentia* and *existentia* are identical

In this way, Nominalism, by proceeding from the idea of the *potentia absoluta dei*, renewed the Augustinian tradition of the separation of philosophy and theology and at the same time radicalized it—not with profane intent, but in order to subject human knowledge, limited by definition, once and for all to Revelation. Not empiricism causes the turn to faith here, but vice versa: faith seeks a philosophy as a genuine *ancilla theologiae* [handmaiden of theology], namely one that can prove on its own and on the basis of empiricist epistemology the incurable limitation and fragmentariness of all human knowledge. Thereby, however, the relationship between theology and philosophy, as it was understood within the framework of *credo ut intelligam*, dissolves, since it is no longer accepted that the correctness of faith can vouch for the correctness of the philosophy (metaphysics) rationalizing it: for with regard to this latter, the question of its correctness does not pose itself at all—it is simply impossible.³¹ Nominalist skepticism thus turns exclusively against the rational knowledge of Being and not against the doctrines of the Church; it is a fideistic skepticism that shakes confidence in thinking to support trust in faith.³² If the only sure human knowledge consists in propositions with immediate empirical reference, then theology cannot represent a rationally constructed theoretical building; the only knowledge here is faith. Precisely for this reason, theology is incompatible with any kind of doubt; it is thus immediately plausible and credible for the believer in its totality, just as it must appear *a limine* incomprehensible and absurd to the non-believer; the hope of Thomas that he could convert non-believers through rational conviction proves thus to be unjustified. Against the Thomistic view that theology consists of truths which are themselves recognizable in the light of a higher or supernatural knowledge, so that faith produces rational knowledge from itself without modification of its own substance in the process of rationalization, Gregory of Rimini holds the following argument: the principles of knowledge cannot be found outside the realm of knowledge itself; they can therefore produce no knowledge if empiricism is not capable of doing so; but empiricism alone can produce knowledge as it is possible for us, while the principles of theology are supra-empirical.³³ In this perspective, the convergence or even the partial fusion of the nominalist movement with the strong mystical currents of the 14th century appears anything but paradoxical, although we

for Occam (*Collected Articles*, esp. 377 f., 396, 398 f.). In these general concepts, Occam's "metaphysics" would thus consist.

³¹ Oberman, *Harvest*, 35, 41.

³² Lang, *Wege der Glaubensbegründung*, 146; cf. Oberman, *Some Notes*, 68 f. Elsewhere (*Harvest*, 426)

Oberman aptly reminds us that Occam's doctrine was never condemned by the Church, although its orthodoxy was examined by a papal committee. In 1347, the doctrines of Nicolaus d'Autrecourt and Jean de Mirecourt were indeed condemned, but their disputed points did not seem so closely connected with the nominalist principle that a condemnation of Nominalism in toto would have become necessary. The condemnation of those doctrines is in any case not to be accorded greater significance than that of some Thomistic theses in the year 1277.

³³ Leff, *Gregory*, 217 ff.

must perhaps distinguish between the general type of nominalist mysticism and the mysticism of, e.g., an Eckhart.³⁴

The epistemological empiricism that the Nominalists opposed to every abstracting knowledge and therefore to every metaphysics also had its theological premises: as said, the *potentia absoluta dei* and the *contingentia mundi* following from it smashed the (intelligible) hierarchy of substances and thus metaphysics as their rational grasping. With it fell also abstracting-abstract knowledge, whose goal and *raison d'être* was the establishment of that hierarchy through the transcending of immediate sense data with the help of the categories of thought. Now the world consisted of separate and at the same time independent and uniform individual things, of things, that is, which could not be split and ordered according to the Aristotelian distinction between first and second, between empirical and intelligible substance; each of them formed the object of an empirical knowledge that proceeded without the mediations of thought, immediately and intuitively. For the scholastic-Aristotelian view, dwelling on the empirical properties of individual things represented only the vestibule of ontology; its second and more important step was the abstraction from the empirically given to find out the incorporeal substance hidden behind it and to integrate it into an intelligible coherent chain. If abstraction is now considered impossible by definition, since its metaphysical foundation (i.e., the rational and rationally graspable order of Being) falls away, then knowledge can actually only consist in the intuitive penetration of the world of empiricism. After the dissolution of the ordered intelligible world, knowledge identifies itself with the immediate grasping of the individual thing in its independence and unrepeatable individuality.³⁵ If the ontological hierarchy is smashed and every individual thing stands isolated, then the knowledge of the (others) cannot be derived from the knowledge of the one. Logic is incapable of mediating knowledge that we do not yet possess, i.e., of establishing relationships between the known and the unknown, since the knowledge we alone possess, i.e., simple, immediate, and intuitive knowledge, remains unique and singular in its inseparable reference to its respective object. Certainly, we also possess abstract-composite knowledge; its truth, however, depends on the truth of the simple and intuitive, so that it cannot provide the sure and autonomous support or stage of a logical induction. The principle that the knowledge of one thing cannot mediate the knowledge of

³⁴ Oberman, *Harvest*, 331, 339. Ozmen (*Mysticism, Nominalism and Dissent*, esp. 85 ff., 91 f.) establishes the ideological influence of mystical currents on the revolutionary movements of the 14th and 15th centuries, to draw *e contrario* the conclusion that the general social-conservative trait of Nominalism excludes an inner kinship with mysticism.

³⁵ Vignaux, *Nominalisme*, 22 ff., 86 ff., 95 f.; Leff, *Gregory*, 120 ff. Hochstetter, *Studien*, 12 ff., had already pointed out the theological presuppositions of Nominalism.

another refutes the Thomistic view of the uniform and homogeneous *habitus* of knowledge, which alone permits its systematic articulation.³⁶

On the basis of this analysis, it can be better understood why Nominalism, contrary to the positivist legend, could not clear the way for modern natural science. It is true that it ruined the constructions of scholastic-Aristotelian logic and ontology by restricting the possibility of knowledge to the empirical world. The mathematical natural science of the 17th century certainly also started from a similar position, but it did more and something very different from it: it separated itself from immediate empiricism in order to be able to grasp the sensible world as a whole mathematically, i.e., it separated the primary from the secondary (perceptible and changeable) properties of bodies and disregarded the latter, since they could not be subjected to a purely mathematical treatment. Thus, the path of abstractions opened up again, although naturally, the natural-scientific abstraction differed fundamentally from the scholastic-Aristotelian one.³⁷ This difference, however, formed only the consequence of another, much more important one. Nominalist empiricism was causally connected with the view of the *contingentia mundi*, whereas, on the contrary, a theoretical main concern of mathematical natural science was the eradication of contingency from nature by means of the assumption of a strict lawfulness of nature. Belief in the inner logic and necessity of nature forms the ontological cornerstone of modern natural science and implies for its part a general ontological upgrading of the material world, which in traditional metaphysics was considered inaccessible to rational grasping in contrast to the sphere of transcendent spirit.³⁸ This view remains completely foreign to theoretically inspired Nominalism, and therefore the efforts of the 14th century in the field of physics could actually only produce reinterpretations of already known phenomena within the fixed Aristotelian framework.³⁹

³⁶ Weinberg, *Nicolaus*, esp. 31, 36, 37; cf. Lappe, *Nicolaus*, 11 ff., 18 ff., and especially Leff, *Gregory*, 52 ff., esp. 59 f., 62 f. Gregory's effort to moderate Occam's empiricism by holding fast to the duality of intelligible and sensory experience remains interesting nonetheless (29 f., 39 ff., 46 ff., 92 ff.). We may see in this the expression of a more general theological concern for the autonomy of the spirit.

³⁷ On the difference between these two types of abstraction, see Cassirer, *Substanzbegriff*, 32 f.

³⁸ In detail on this, Kondylis, *Aufklärung*, esp. 42 ff., 80 ff.

³⁹ A. a. O., 90 f. (with bibliographic references); cf. Leff, *Dissolution*, 93 ff.

2. The Humanist Movement and Metaphysics

a. Nominalism and Humanism

The inability of Nominalism to burst the conventional worldview frame or even to shift it—especially since it never set itself such a goal—was reflected in its historical fate as a concrete movement with concrete carriers. By wavering between empirical knowledge and mysticism and often allying with the followers of Duns Scotus against the Thomists or with the latter against the former, it did not succeed in acquiring a firm identity; the *via moderna* compared itself frequently with the *via antica*, as one can see from the teaching programs of the universities, or it lost itself in a labyrinth of conceptual and terminological subtleties, on which scholastic acumen loved to practice after the elimination of the old ontological questioning.⁴⁰ The outline and direction of the nominalist movement became even vaguer due to the fact that the concept of Nominalism itself meant different things that did not necessarily belong together. In a metaphysical respect, it meant that there are only individual substances; in an epistemological respect, that empirical-intuitive knowledge is the only possible kind; in the field of logic, finally, Nominalism concentrated on the linguistic-grammatical study of terms, which is why it was also called Terminism. The metaphysical and the epistemological meanings of Nominalism did not coincide, however, for consistent empiricism could also deny individual substances and view things as complexes of sensible qualities, while the linguistic study of logical terms was by no means limited to the circle of those who shared the metaphysical and epistemological positions of Nominalism. The analysis of logical terms with regard to their function in the sentence and in the system of language in general, as well as the connection of the question of truth with the problem of its linguistic articulation, were older than Occam's work; those who occupied themselves with it had by no means the feeling that they were thereby distancing themselves from Aristotelianism, and they divided themselves into Nominalists and Realists depending on whether they assumed a logic *in voce* or *in re*, without the method of interpretation changing significantly on the basis of grammatical and linguistic data.⁴¹ In short, the dispute between Nominalism and Realism concerned the metaphysical reality of concepts, not their logical definition.⁴² Characteristic of this situation was Occam's benevolence toward Aristotelian logic, which he defended theoretically in a twofold manner: directly, when he defended the indivisibility of the system of categories against contemporary attempts at revision⁴³, and indirectly, when he ascribed a series of nominalist theses to Aristotle, apparently with the intention of supporting them additionally through the authority of the

⁴⁰ Ritter, *Studien*, esp. 81 ff., 24 ff.; cf. Leff, *Dissolution*, 16, 19 f.

⁴¹ Preti, *Dialettica terministica*, esp. 66 f., 69 f., 74.

⁴² Cassirer, *Substanzbegriff*, 11.

⁴³ *Summa logicae*, I, 41 = S. 105.

great philosopher or at least not touching this authority. Thus he opined that Aristotle had never assumed purely intelligible substances (*secundae substantiae*)⁴⁴ nor held universals to be substances⁴⁵; at the same time, he appealed to him to support his view on the synonymy of concrete and abstract terms (e.g., *calor-caliditas* or *homo-humanitas*), whereby the eradication of the latter was intended.⁴⁶

But also in the controversial question of universals, Occam's attitude was differentiated and not merely iconoclastic. The ontological reality of universals was, of course, denied by him, specifically on the basis of the distinction between subjective acts of thought or speech and objective givens. Sentences exist only in thinking, in speaking, and in writing, thus the components of sentences are also to be found only in these three areas. The *substantiae particulares* can therefore not form components of sentences because they cannot in themselves take a place in thinking, in speaking, and in writing, but must be represented by symbols (words and concepts). But if a sentence cannot consist of individual substances, it is on the other hand quite possible that it is composed of universals, which proves the essential heterogeneity of the two mentioned quantities.⁴⁷ Nevertheless, Occam did not simply assign universals to arbitrary fictions; in his view, they arose either through convention (*universale ex institutione*) or as products of a natural and spontaneous thought process (*universale naturaliter*).⁴⁸ Since he held only the intuitive knowledge of the individual (*notitia intuitiva*) to be complete knowledge, he regarded universals as a kind of confused knowledge⁴⁹ and emphasized their exclusive character as thought (*in mente*)⁵⁰; admittedly, he could not satisfactorily explain their origin, although he knew and said that the real question lies not in the explanation of the transition from the general to the individual, but from the individual to the general. He mentioned a total of five views on the manner in which universals could be present *in mente*, and three of them he even held to be possible; the decision, however, remained open.⁵¹ The treatment of universals by Occam shows, at any rate, that he was less interested in their complete eradication than in

⁴⁴ A. a. O., I, 42 = S. 109 f.

⁴⁵ A.a.O., I, 15 = S. 47 f.

⁴⁶ A. a. O., I, 6-9 = S. 19, 22. Occam's general attitude toward Aristotle as well as the fusion of Aristotelian and Augustinian elements in his thought is aptly described by Guelluy, *Philosophie et Théologie*, 367 f.

⁴⁷ *Summa logicae*, I, 15 = S. 48.

⁴⁸ A. a. O., I, 14 = S. 45. On the quasi-automatic emergence of universals without the cooperation of thought or will, cf. *I Sent.* d. 2, q. 7, CC, as well as *II Sent.* q. 25, O.

⁴⁹ *I Sent.* d. 27, q. 3.

⁵⁰ *I Sent.* d. 2, q. 8, Q.

⁵¹ *I Sent.* d. 2, q. 8, BCDEF and Q. Interpretations of Occam's fluctuation on this point and conjectures about the development of his views on it can be found in Hochstetter, *Studien*, 90 ff., and Boehner, *Collected Articles*, 169, 215 ff.

withdrawing their conventional ontological content from them and using them as logical instruments.⁵²

This brief reference to the versatility and substantive vagueness of the nominalist movement is intended to make more understandable the ambivalence or even contradictoriness that characterize the relationship of Humanism to it. Early Humanism took shape in the time of the unfolding of Nominalism and stood under its influence, which, however, was not genetic and path-breaking, but rather atmospheric, without assuming firm conceptual forms. The different origin of both movements explains the loose character of their relationship to one another: while Nominalism springs from the womb of Augustinian-Franciscan theology and in the crisis of the 14th century seeks the sources of genuine religiosity by means of an epistemological critique of the intellectualistic metaphysics of scholastic Aristotelianism, Humanism roots in the young, vigorous, bourgeois communes of Italy and builds its world of thought with materials taken largely from ancient models. Both movements reject metaphysics as rational knowledge of Being or God; because of their different origin and essence, however, they search for ways that diverge from one another even where they seem to meet from a distance. This becomes clear if we investigate the fundamental argumentations of both sides against metaphysics more closely, i.e., the decoupling of metaphysics and logic on the basis of the linguistic analysis of the latter, on the one hand, and the primacy of will and action over thought and theory, on the other.

Although the linguistic analysis of logical terms neither began with Occam nor was restricted to nominalist circles, this does not alter the fact that the work of these latter, and above all their critique of universals, made an enormous contribution to sharpening the sense for the interdependence of language, logic, and ontology. One can easily convince oneself of this if one reads those penetrating pages in which Occam withdraws the ontological foundation from the distinction between concrete and abstract (which in Thomas coincided with that between *existentia* and *essentia*, in Duns Scotus with that between *individuum* and *natura communis*) and attributes to it an exclusively terminological and grammatical character, bringing to light a wealth of conceptual nuances and mutual relationships of parts of speech.⁵³ With equal acumen, Occam develops his theory of *suppositio*, which likewise had its precedents. *Suppositio* is the substitution of one term by another, so that finally a reduction to something real and individual can be achieved; the *suppositio*, in other words, provides criteria that enable a judgment as to whether a term is used in the essential sense, by taking the place sometimes of the subject, sometimes of the predicate in a sentence.⁵⁴ Corresponding to Occam's restrained attitude toward Aristotelian logic, the ultimate goal of his subtle analyses remains nonetheless the logicization

⁵² Cf. Leff, *Dissolution*, 75 f.

⁵³ *Summa logicae*, I, 5–10 = S. 16 ff.

⁵⁴ *A. a. O.*, I, 63 ff. = S. 176 ff.

of language by means of the study of the linguistic garb of logic⁵⁵—while the Humanists do something fundamentally different: to logic as a rigid system of rules uninfluenceable by the unpredictable play of language, they oppose language as a multidimensional, free expression of an inexhaustible wealth of human situations, capable of multiple variations.⁵⁶ This is the sense of the absolute priority they grant to rhetoric over logic—a priority, incidentally, which is causally connected with the mentioned different origin of Nominalism and Humanism. Precisely this new view of the relationships between language and logic lends the humanist critique of metaphysics a greater intensity and at the same time a novel character.

The representatives of the humanist movement themselves had from the beginning the feeling that something important separated them from Nominalism and Terminism. Although they were not able to grasp this separating moment conceptually, they detested the labyrinthine syllogisms and complicated demonstrations that thrived in the Terminist schools and in their eyes were not far removed from the usual dialectical games of the Scholastics; it cannot be denied, after all, that the nominalist movement, unable as it was to touch the conventional worldview priorities, wore itself out more and more with terminological subtleties. The vehemence is therefore understandable with which Petrarca takes the field against the "Britons" (i.e., Occam and his followers) and their barbaric, empty dialectic.⁵⁷ No less vehemently did Salutati express himself a few decades later about the "nebulous," "novel," and incomprehensible speeches of the *moderni*, whom he threw into one pot with the representatives of traditional Scholasticism.⁵⁸ And Bruni likewise condemned the dialectic of the "Britons," designating it as overseas barbarism and naming Occam personally as a deterrent example.⁵⁹ These clear statements should not, however, let us forget that the writings of the Terminists spread in Florence towards the end of the 14th century and exerted a noteworthy influence,⁶⁰ wherein the objective points of contact of the *moderni* with humanist tendencies sometimes appeared in the defense of Nominalism on the part of scholars who stood close to Humanism.⁶¹

This same simultaneous convergence and divergence of Nominalism and Humanism can also be established in the field of praxeology, as this takes shape in the light of fundamental

⁵⁵ Occam by no means demands a return to natural language usage, as the Humanists later often did; rather, he emphasizes on the contrary the difference between the language of logic (*nomina mentalia*) and colloquial language (*nomina vocalia*): the rules of the former apply to the latter as well, but not vice versa (*Summa logicae*, I, 3 = S. 12). The richness of colloquial language is thus indifferent, if not misleading, from a logical point of view.

⁵⁶ See details on this in Sect. 2 b of this chapter.

⁵⁷ *Le Familiari*, I, 7 = I, 37.

⁵⁸ *De laboribus*, I, 1 = I, 3f.

⁵⁹ *Dialogus*, 58.

⁶⁰ Garin, *Cultura fiorentina*, esp. 183 f.

⁶¹ E.g. Fr. Landini and Fr. Rinuccini, see Vasoli, *Dialettica*, 18 ff.

theological and anthropological options. The nominalist rejection of metaphysics as rational knowledge of Being and of theology as *scientia* awakened interest in the practical-moral and soteriological aspects of Christian doctrine⁶²—a turn that manifested itself in the radicalism of many Franciscans both with regard to the question of poverty as a Christian duty and with regard to the revival of eschatological expectations.⁶³ This priority of the practical aspects of theology over the theoretical-dogmatic ones found its anthropological expression in the doctrine of the primacy of the will over the intellect. Here too, the struggle of theology against Arab-Aristotelian or Averroistic philosophy acted as a catalyst, in which the freedom of the individual will seemed to lose itself in the rigid causal determinations of a supra-individual, thus divine, but equally determined intellect, into which, moreover, the human soul merged after death, renouncing its individuality. The primacy of the will turned, however (as the condemnation of Thomistic theses in the year 1277 shows), also against what was considered a Thomistic concession to Averroism. At any rate, in the 14th century the view gains ground that the psychic functions are interlaced with one another and all permeated by the will, to which cognitive faculty is also attributed.⁶⁴ Occam, too, had assumed that the *intellectus* is indivisible and only the respective *habitus* makes it theoretical or practical, whereby the practical is still present in the theoretical *intellectus* and the theoretical in the practical.⁶⁵

There is no doubt that the humanist movement, especially in its earlier phase, essentially shared these views. First of all, it stood suspiciously or hostilely toward Thomism and the transformation of theology into *scientia*, while it allowed itself to be influenced by the Augustinian and Franciscan theology of grace. At the same time, it upgraded the role of the deed and of experiencing by appropriating voluntaristic positions.⁶⁶ All this does not mean, however, that the (early) Humanists received contemporary Nominalism at first hand and in knowledge of its theological presuppositions. Their spiritual proximity to it is explained by the mutual confession to certain Augustinian commonplaces, which turned equally against Arab-Aristotelian philosophy and Thomistic scientific-metaphysical theology. Incidentally, it happened that the Humanists appealed to the mentioned views against the Nominalists themselves, e.g., by denouncing the one-sided theoretical preoccupation with questions of logic in the sense of the primacy of will and deed. The concept of the deed ultimately differentiates the humanist movement from Nominalism and gives its anti-metaphysical attitude a new impetus. In Augustinian and nominalist theology, will and deed stood indeed in the

⁶² Oberman, *Harvest*, passim.

⁶³ Leff, *Heresy*, I, 51 ff. On the dispute of the Franciscans with the Pope over the question of poverty and on Occam's defense of the Franciscan position, see 238 ff.

⁶⁴ Michalski, "Le problème de la volonté à Oxford et à Paris au XIVe siècle" in *La philosophie*, esp. 310 f.

⁶⁵ *I Sent.*, prol., q. 12, X.

⁶⁶ Trinkhaus, *In our Image*, I, 60, 69 ff.; cf. *The religious Thought*, esp. 347.

foreground, but they spent themselves in the endeavor to find the way to God and his grace (also through good works), they referred thus primarily to the individual and his inner life; in contrast to this, Humanism gives the primacy of the *vita activa* a much broader sense, by uncovering and emphasizing the social and profane component in it. Therefore, the primacy of the deed became interlaced with the turn to rhetoric as the science of social communication by means of language and thus opened the way to a new and deeper critique of metaphysics. We now turn to the analysis of this complex of ideas.

b. The Humanist Turn toward Rhetoric in its Interweaving with Fundamental Anti-Metaphysical Positions

The modern critique of metaphysics took shape through the questioning, specifically the conscious polemical reversal, of certain basic convictions on which the Platonic and Aristotelian as well as the Christian metaphysical construction rested. Central among them was the thesis that the possibility and certainty of knowledge are grounded in the immutability and the inner rational structure of the object of knowledge. The persistent and disciplined effort of the subject constitutes, of course, a self-evident prerequisite for the attainment of knowledge, especially of the higher kind, but any knowledge must remain incomplete regardless of the intensity of the subjective effort if its object is characterized by changeability and inconstancy, which do not permit a penetration to the ultimate and final principles and therefore do not let knowledge become metaphysical knowledge. From this primary significance of the certainty of the object of knowledge (*certitudo obiecti cognitionis*) resulted the core idea of traditional metaphysics that namely only the eternal and immutable sphere of transcendent spirit, but not the inconstant and unpredictable sensible world, is capable of a purely rational grasping. From this basic attitude, i.e., from the evaluation of knowledge on the basis of the nature of Being and not, for instance, vice versa, two equally important and characteristic positions of traditional metaphysics are derived. First, the immobile and immutable highest object of knowledge is not subject to any influence on the part of the knowing subject, it can neither be shaped nor simply created by the activity of this latter; knowledge, even perfect knowledge, is essentially reproducing and passive. Precisely for this reason (and this is the second position) the *vita speculativa*, which is dedicated to the investigation and knowledge of true Being, remains by definition and in all cases superior to the *vita activa*, since this, however much it may perfect itself, is forever attached to the inconstant world of coming-to-be and passing-away; it is known, incidentally, what forms this primacy of the *vita speculativa* or *contemplativa* over the *vita activa* has assumed both in the Platonic-Aristotelian and in the Christian worldview.

The mentioned three basic theses drew the polemical attention of critics of metaphysics from an early time. Against the axiom that the certainty of knowledge depends on the constancy of the

object of knowledge, it was objected that the reliability of knowledge relies on the soundness of the method of knowledge applied; the *certitudo modi cognitionis* [certainty of the mode of knowledge] thus eclipsed the *certitudo obiecti cognitionis*, and this effected a drastic ontological downgrading of the immutable sphere of the Transcendent, by directing attention now to the changeable world of experience and at the same time to the knowing subject. And in fact, the view that the sensible world can be made the object of rigorous rational knowledge using the method suitable for it forms the beginning of the end of traditional metaphysics. Since the knowledge of the sensible world takes place on the basis of a method and since the method represents the mode of knowledge of a subject, the dissolution of metaphysics appears as the replacement of the primacy of ontology by the primacy of epistemology. The activity of the human subject is, however, also upgraded by the assumption that man can ultimately only know perfectly what he himself creates; the sphere of the Transcendent, which can neither be created nor practically influenced by man, must therefore withdraw from his knowledge, even if its existence is not doubted. The new principle, according to which true knowledge is to be found only in the products of human activity and even coincides with them (*verum factum convertuntur*), eliminates the transcendent aspect and initiates an overthrow of the conventional relationship between theoretical and practical life; the primacy of the *vita activa* clears away the time-honored precedence of the *vita speculativa*, while at the same time the concept of the *vita activa* expands to mean the social character of human activity. In this way, all three basic views of traditional metaphysics are rejected. They hung together logically and therefore had to be rejected *en bloc* eventually. Their belonging together was, however, not realized by everyone and with equal clarity. Initially, the primacy of the *vita activa* (specifically in its interweaving with Augustinian and anti-Thomistic anti-metaphysical motives) was emphasized, while gradually the principle *verum factum convertuntur* also gained ground. The decisive declaration of the sensible world as the object of rational and methodical knowledge occurred later and was only sufficiently grounded by the mathematical natural science of the 17th century. But the approach to this too can be traced, albeit in a highly contradictory manner, in the writings of the Humanists, and this entitles us even more to pay them greater philosophical attention than that which they have attracted so far.

The humanist movement can be illuminated best in the perspective of interest here if we dwell on the concept of rhetoric as it has developed in its contrast to scholastic-Aristotelian logic and dialectic (both terms were used largely synonymously in the Middle Ages). We do not want to take a position here on the view of prominent researchers⁶⁷, according to which the humanist movement could be made understandable exclusively on the basis of the turn to the *studia humanitatis*, specifically rhetoric, since it did not ally itself with any particular philosophical

⁶⁷ Primarily Kristeller, *Renaissance Thought*, 8 ff.; cf. Gray, *Renaissance Humanism*, esp. 499-501.

direction and stood as a stranger to logical as well as physical-mathematical disciplines. We must, however, recall this view so that the importance of the aspect discussed here becomes clear. As we have already indicated in the comparison of the nominalist with the humanist understanding of language, rhetoric meant to the Humanists neither mere flowery speech nor sophistic art of argumentation, but the science of social communication of humans by means of language. By recurring to Cicero's relevant texts, the Humanists overthrow the Platonic-Aristotelian precedence of philosophy over rhetoric⁶⁸ and thus also the precedence of the philosophical ideal of the One truth to be reached by logical means; the upper hand is now retained by the rhetorical ideal of persuasion, which can be achieved with probabilistic or even casuistic arguments. In the traditional view of the relationship between philosophy (logic) and rhetoric, which predominated in the Middle Ages, lay the fundamental metaphysical contrast between the stability of true Being and the inconstancy, indeed the delusion of the phenomenal world, which by its nature must abet sophistic endeavors to cover up or reverse the real order of things. Therefore, the humanist turn to rhetoric implied *eo ipso* an option for the sensible-phenomenal world and a turning away from the Transcendent. The reality that is to be shown and at the same time influenced by rhetoric is fluid, inconstant, and open. Persuasion, i.e., the goal of rhetoric, can therefore only be achieved with means that are essentially related to this reality, so that the rhetorical proof must differ radically from the scholastic-Aristotelian *demonstratio*; the turn to rhetoric therefore brings with it, as we shall see, a downgrading and often also an open condemnation of conventional philosophical logic. Although *probabilitas* has less ontological bearing capacity and thus less philosophical value than *veritas*, it is best suited for orientation in an inconstant and not infrequently unpredictable world. The question reads: which reality does one choose as the space for the unfolding of one's own activity—the firm but inaccessible one of true Being or the fluid and finite but tangible one of the phenomenal world? The turn to rhetoric implied that the things of this world were seen in the openness of their unfolding, in the never-subsiding game of speech and counter-speech, of friendly and hostile communication between humans; language as expression of the immense variety of human attitudes and situations thus constitutes an essential aspect of the things of this world in their dynamic formation and consideration.

That the new precedence of rhetoric over philosophy (logic) generally promoted an anti-metaphysical, and indeed profane attitude, showed itself negatively but clearly in the polemic of representatives of later, metaphysically oriented Humanism against it. Thus, Florentine Platonism of the second half of the 15th century, which formed in an atmosphere of Hermeticism and Mysticism (when namely the civil-patriotic disposition of the generation of Salutati and Bruni had already withered under the sole rule of the Medici), wanted to restore

⁶⁸ Generally on this, Seigel, *Rhetoric*, 3 ff.

the old precedence of philosophy as finder and possessor of the One eternal truth.⁶⁹ Apart from the friendly-to-this-world attitude that rhetoric presupposed and promoted, it undermined metaphysics in two further respects. First, it abetted relativistic and skeptical tendencies, since the ability of an orator to defend two opposite positions often with equally good arguments vividly demonstrated the dependence of the respective truth on a certain standpoint, on certain interests, and on certain modes of argumentation: Cicero, the idol of the new rhetoricians, had indeed already shown how intimately rhetoric and skepticism were connected. Rhetoric ran counter to metaphysics even more directly by going hand in hand with the assumption of the primacy of the *vita activa* over the *vita speculativa*. This assumption already conditioned the way in which language was understood at all, i.e., not as a means for the formulation of thoughts in their most abstract refinement, but as an effective instrument for the exercise of social influence.⁷⁰ Behind the contrast regarding the essence and use of language, however, lay the contrast between the human type of the contemplative hermit and that of the active citizen. The turn to rhetoric takes place under the conditions of the development of the Italian communes, which expresses itself ideologically in the glorification of the *vita civilis*, as this is shaped by the collective activity of citizens who are no longer intent on the salvation of their soul, but rather on the common good in its entire secular reality.⁷¹ Against this background, the lively and immediate influence of rhetoric on moral-political action as well as its interweaving with all aspects of social life is emphasized—in contrast to the practical sterility of philosophy,

⁶⁹ On the views of the Florentine Platonists regarding this and the related disputes, Breen, *Giovanni Pico della Mirandola on the Conflict of Philosophy and Rhetoric*, 384 ff., provides information; cf. Gray, *Renaissance Humanism*, 507 ff.

⁷⁰ Cf. Breen, *Subordination*, 13.

⁷¹ On the connection between the primacy of the *vita activa* and the ideal of the *vita civilis* as articulated by Manetti, cf. the remarks by Wittschier, *Manetti*, 196 ff. In his excellent work *The Social World of the Florentine Humanists* (esp. Ch. VII, pp. 263 ff.), Martines has demonstrated that the prominent Humanists, contrary to the legend of the poor humanist scholar, belonged to the financial upper class and many of them even came from politically influential families. For this reason, they took an immediate part in the formation of the official ideology at a time when their class was extraordinarily politically active—both internally, where it monopolized power by suppressing the uprisings of the lower classes and displacing the middle classes from government, and externally, where the fight against the "tyrant" Sforza gave rise to the emergence and codification of a democratic rhetoric (cf. Baron, *Crisis*, 14 ff.). This urge came to a standstill with the rise of the Medici and the resulting ossification of political life; Humanism then detached itself from politics and intoned the hymn of praise to metaphysics and the *vita speculativa* (Ficino, Giovanni Pico della Mirandola). The primacy of the *vita activa* was already moderated in Filelfo and Pontano, see Rice, *Wisdom*, 49 ff. How close the binding of the first generation of Humanists was to politics and therefore also to the *vita activa* or its rhetorical expression is shown very nicely by Herde (*Politik und Rhetorik in Florenz*, 141 ff.) using the example of Salutati, who served the Republic not least by drafting the appropriate political theory.

especially metaphysical [philosophy].⁷² The connection between the development of the political life of the bourgeois communes and the primacy of rhetoric was incidentally quite conscious to the enemies of rhetoric and *libertà*.⁷³

In Petrarca's writings, the first steps of the humanist movement towards the upgrading of rhetoric vis-à-vis philosophy (logic) and at the same time towards the primacy of the *vita activa* can be traced. The upgrading of rhetoric remains contradictory here, since the traditional view of the superiority of philosophy strongly influences Petrarca's thought,⁷⁴ while the primacy of the *vita activa* emerges still within the framework of the search for a "pure" Christianity, which would be free of dogmatic ballast and at the same time capable of taking into account the existential concern of man, who seeks in his self-knowledge the beginning and the key of all wisdom. The Augustinian tradition thus remains alive,⁷⁵ yet the signs of the new time are unmistakable in Petrarca's thought, as when he, e.g., tacitly pushes aside the doctrine of the Fall or the notion of the world as a vale of tears.⁷⁶ Basically, it holds that the knowledge of the external world cannot be of use for the attainment of blessedness if human nature is ignored or suppressed.⁷⁷ As this connection of anthropocentric attitude and the question of blessedness shows, the concern for the practical aspect and the practically useful stands in the foreground here. The noblest part of philosophy is the practical [part],⁷⁸ and virtue is considered more valuable than any theoretical knowledge.⁷⁹ This central view is underpinned by Augustinian and fideistic arguments. As Petrarca thinks, the empty pride of the Aristotelian or Platonic philosopher is good for nothing in comparison to the spontaneous, practically oriented piety of a believer, who confesses his ignorance and unworthiness in humility;⁸⁰ Augustine is therefore right when he considers him the true philosopher who loves God.⁸¹ But if love stands above all knowledge, then the mind [Gemüt] or the will must also have precedence over the intellect. Petrarca combines this authoritative anthropological thesis with the superiority of practice over theory and underpins his strict distinction between knowledge and love, intellect and will by the argument that the knowledge of virtue is useless without practical application.⁸² The good

⁷² See characteristically Poliziano, *Oratio super Fabio Quintiliano*, esp. 882, 884.

⁷³ On Patrizzi's views on this see Garin, *Medioevo e Rinascimento*, 124 ff., 147 ff.

⁷⁴ See the analysis of Petrarca's contradictions in Seigel, *Rhetoric*, 31 ff.

⁷⁵ On Petrarca's personal relationships with members of the order [Augustinians], see Mariani, *Petrarca e gli Agostiniani*.

⁷⁶ Petrarca's tacit corrections to Augustine are rightly highlighted by Heitmann, see *Augustins Lehre in Petrarca's 'Secretum'*, 34 ff.

⁷⁷ *De sui ipsius et multorum ignorantia*, II = *Opere latine*, 1032–1034.

⁷⁸ *Invectivae contra medicum*, II = *Opere latine*, 886.

⁷⁹ *De sui ipsius...*, II = *Opere latine*, 1044.

⁸⁰ *A. a. O.*, 1046.

⁸¹ *Invectivae...*, II = *Opere latine*, 886.

⁸² *De sui ipsius...*, IV = *Opere latine*, 1106, 1108.

and pious will is preferable to schooled and clear thinking; the goal of the former is the Good, the goal of the latter is the Truth—but better to want the Good than to know the Truth.⁸³

The primacy of the deed and of the will over theory and the intellect applies *a fortiori* if the rational knowledge of God is inaccessible to us.⁸⁴ Proceeding from this fideistic agnosticism, Petrarca attacks the scholastic-Aristotelian mixing of dialectic, metaphysics, and theology.⁸⁵ The use of dialectic, he opines, turns theologians into sophists who care about the knowledge of God without loving him. Dialectic can only be a means, and only as a mere means is it of some use; syllogistics is again empty, and the self-complacency of the intellect can even make a dangerous affair out of it, since everything can be proved with the help of its artifices.⁸⁶ How can Aristotle know what no reason and no experience can grasp?⁸⁷ Petrarca remembers Augustine's disparaging statements about the lies and errors of the philosophers⁸⁸ and asks himself how the scholastic coupling of Aristotelian logic and metaphysics is possible, when obviously anti-Christian doctrines like that of the eternity of the world are represented in Aristotle.⁸⁹ The attempt at a rational grasping of these problems is in vain, and human knowledge will always remain void in comparison to absolute divine knowledge.⁹⁰ Precisely for this reason, that *scientia* which is built up with the help of dialectic cannot be as valuable as poetry as universal expression of the manifoldness of human situations by means of the cultivation of language. Language constitutes the primary factor of any knowledge and any intellectual creation.⁹¹ By representing the tangible contrast to the dryness of scholastic dialectic, it leads automatically into the wide world of culture, which Petrarca wants to encompass intellectually by way of a fusion of his Christian attitude with ancient rhetoric and poetry.⁹²

Salutati's Humanism also teems with Christian elements, which, as shown in his debate with Poggio, the ardent admirer of antiquity, set limits to his profane-pagan inclinations and brought him close to Petrarca's ideal of a Christianity that, freed from scholastic-Aristotelian metaphysics, would be rebaptized in the spirit of the Church Fathers, especially Augustine, and at the same time reconciled with the *studia humanitatis*.⁹³ We do not want to deal here with the

⁸³ A. a. O., 1110.

⁸⁴ A. a. O..

⁸⁵ *Le Familiari*, XVI, 14 = I, 12 = III, 913.

⁸⁶ *Invectivae...*, II = *Opere latine*, 876; cf. *Le Familiari*, I, 7 = I, 38.

⁸⁷ *De sui ipsius...*, IV = *Opere latine*, 1062, cf. 1102.

⁸⁸ *Invectivae...*, III = *Opere latine*, 906.

⁸⁹ *De sui ipsius...*, IV = *Opere latine*, 1102.

⁹⁰ A. a. O., III = *Opere latine*, 1050.

⁹¹ *Invectivae...*, III = *Opere latine*, 890 ff., esp. 900.

⁹² Cf. the analysis by Saitta, *Il pensiero*, I, 97 ff.

⁹³ Martin, *Salutati*, 42 ff., 55 ff.

various aspects of Salutati's thought in their heterogeneity and contradictoriness,⁹⁴ but restrict ourselves to the discussion of those points that are relevant for the formation of modern critique of metaphysics. Salutati knows how closely in the scholastic-Aristotelian view the status of metaphysics was connected with the precedence of the *vita speculativa* over the *vita activa*.⁹⁵ If he therefore connects the rejection of metaphysics as rational knowledge of Being with the primacy of the *vita activa*, then he consciously reverses the traditional priorities. Looking at the truth, he writes, cannot be the true destination of man, if the wish for perfect knowledge must remain unfulfilled anyway. The powers of the individual are limited, and correspondingly limited remains not only the scope but also the clarity of the knowable; the first infinite cause can in no case be grasped by the human intellect.⁹⁶ Moreover, theoretical knowledge (*sapientia*) is empty without practical wisdom (*prudentia*), which gives the right life orientation. To the fruitless enjoyments of theory, Salutati prefers the concrete deed within the framework of the family, the circle of friends, and the fatherland.⁹⁷ With this express primacy of the *vita activa*, and specifically in its social dimension, goes the anthropological primacy of the will. But just as Salutati does not write off the *vita speculativa* entirely, but wants to recognize a theoretical and a practical side in *sapientia* itself,⁹⁸ so he does not separate the will from reason entirely, but defines freedom of will as the interaction of will and reason (*actus voluntatis et rationis*).⁹⁹ The hierarchy of faculties remains clear nonetheless: the will sets all psychic functions, the lower as well as the highest, in motion, especially since the intellect is in itself passive; even inquisitiveness roots in the will.¹⁰⁰ The rejection of metaphysics and intellectualism connects here, of course, with theological theses. The grasping of God, opines Salutati, is not a matter of thinking, but a love relationship that comes about through the effect of divine grace and manifests itself in good works.¹⁰¹ For understandable reasons, Augustine is mentioned more often in this context.

Bruni, too, like Petrarca and Salutati before him, expresses his preference for the Christianity of the Church Fathers, specifically Augustine, not yet spoiled by philosophy, and delimits himself against Scholasticism and Thomism¹⁰²; his general attitude is, however, considerably more

⁹⁴ Interpretations of the ambiguity of Salutati's work are offered by Martin, *Salutati*, 260 ff., and Baron, *Crisis*, 104 ff.

⁹⁵ *De nobilitate legum et medicinae*, XXII = S. 176.

⁹⁶ *A. a. O.*, XIX = S. 164.

⁹⁷ *A. a. O.*, XXII = S. 178, 180.

⁹⁸ *A. a. O.*, 178.

⁹⁹ *A. a. O.*, XXIII = S. 182.

¹⁰⁰ *A. a. O.*, 182, 184, 192.

¹⁰¹ *A. a. O.*, 190.

¹⁰² *De studiis et litteris liber* = *Schriften*, 8.

profane and therefore the primacy of the *vita activa* is grounded by him through a recourse to ancient sources. In a practical-utilitarian spirit and with the intention of bridging the gap between earthly happiness and virtue in Christian doctrine, Bruni attempts a synthesis of Peripatetic, Stoic, and Epicurean ethics.¹⁰³ Above all, however, he wants to reinterpret Aristotle in such a way that metaphysics could be judged as a mere secondary aspect of Aristotelian thought; from this, it had to be concluded that the philosophical foundations of scholastic-Aristotelian metaphysics were rotten. This tactic of opposing the "genuine" Aristotle to the Aristotle of the theologians had important polemical advantages for the opponents of Scholasticism and was therefore constantly applied—from Petrarca¹⁰⁴ to Ramus, Bacon, and Galilei. Thus Bruni accuses the pseudophilosophical dialecticians not only of ignorance of the *studia humanitatis*, but also of a lack of familiarity with the Aristotelian writings—quite apart from the fact that these writings, insofar as they have reached us at all, are altered.¹⁰⁵ Aristotle, Bruni believes, moves as a thinker mainly in the areas of rhetoric and ethics; he is interested in what can be useful in daily life and not in distant, strange, and unusable things.¹⁰⁶ Bruni emphasizes not so much the impossibility of highest metaphysical and exact physical knowledge, but rather its uselessness. The speculative life, i.e., *sapientia* and *scientia*, has its merits and charms too, but already because of the fact that it is accessible to few and with difficulty, it must be regarded as a marginal phenomenon; for society as a whole, the active life remains the only meaningful and advantageous attitude—and it counts ultimately.¹⁰⁷ He who is versed in physics and mathematics is not necessarily good because of that.¹⁰⁸ On the basis of the criterion of moral-practical utility, Bruni now estimates the intensity of the Good according to the extensity of its effect. The moral-practical Ought thus identifies itself finally with general social and political deontology; the goal and at the same time the space of unfolding of the *vita activa* is society, which alone can give such a weak animal as man the possibility of perfection.¹⁰⁹

These are the distinct forms that the new anti-metaphysical primacy of the *vita activa* assumes in humanist literature. As we shall see,¹¹⁰ this view will later partly expand, partly modify itself, to then combine with the worldview of modern natural science. First, however, we want to discuss the interweaving of the humanist primacy of the *vita activa* with the two other anti-metaphysical

¹⁰³ *Isagogicon moralis disciplinae* = *Schriften*, 27 ff.

¹⁰⁴ The hollow dialecticians, he thinks, cannot be the true successors of so great a philosopher as Aristotle: *Le Familiari*, I, 7 = I 37; cf. *De sui ipsius...*, II = *Opere latine*, 1032.

¹⁰⁵ *Dialogus*, 56, 58.

¹⁰⁶ *Vita Aristotelis* = *Schriften*, 45.

¹⁰⁷ *Isagogicon...*, *Schriften*, 39.

¹⁰⁸ *A. a.*, O., 21, 40 f.

¹⁰⁹ *Praemissio quaedam ad evidentiam novae translationis Politicorum Aristotelis* = *Schriften*, 73.

¹¹⁰ See below Ch. II, Sect. 1.

positions mentioned at the beginning of this section, namely the axiom *verum factum convertuntur* and the precedence of the *modus cognitionis* over the *objectum cognitionis*. Both positions are presented in humanist literature in embryonic or suggestive form; their later significance and effect, however, makes a reference to their first appearance necessary. Let us return, then, to Salutati and his view on the primacy of the *vita activa* as well as on the social character of this latter. To downgrade the status of the speculative life, Salutati had argued as follows. Theoretical knowledge can appear in two forms, it is namely either *sapientia* (knowledge of Being and the first principles, thus metaphysics) or *scientia* (knowledge of natural phenomena). The former remains, as said, unattainable because of the finite character of human thinking, the latter is again impossible because no exact knowledge of individual things (*scientia individuarum*)¹¹¹ can be conceived without a recourse to most general, thus metaphysical and therefore inaccessible principles. Salutati declares himself in agreement with Aristotle on the impossibility of a *scientia individuarum*—but only to conclude from it that scientific physics is impossible, and indeed (this time against Aristotle) precisely because there can be no rational final metaphysics. The reinterpretation and selective use of Aristotelianism do not stop there, however. Things in general, writes Salutati, can be divided into three classes: supernatural things, natural things, and things that were created by man.¹¹² The rejection of a *scientia individuarum* applies now only to natural things, not to the works of man. Thus medicine as part of physics can be no genuine science, but jurisprudence guarantees the desired certainty of knowledge, since its object, i.e., the law, stands under the sign of principles that do not originate from outside, but from man himself.¹¹³ By means of the axiom *verum factum convertuntur*, the way of knowledge opens up again, which seemed finally blocked after the simultaneous rejection of *sapientia* and *scientia*. Knowledge can exist, but then the metaphysical and physical frame of reference must be abandoned and replaced by the world of human social practice, wherein subject and object of knowledge are essentially identical. But this means that the degree of certainty of knowledge depends not on the ontological status of its object, but on the contrary on the depth of the relationship between the object and the subject of knowledge (i.e., man). The view that the degree of certainty of knowledge is a function of the *certitudo obiecti* is now dropped. Salutati says it explicitly: true and sure knowledge rests not on the logical necessity or certainty of the things to be known, but on the thought functions of the knowing subject; for the thinking that achieves knowledge is neither *passio*, nor *actus*, nor *potentia* of the thought things, but belongs exclusively to the thinking subject.¹¹⁴

¹¹¹ *De nobilitate...*, XVI = S. 110, 114; cf. VI = S. 38.

¹¹² *A. a. O.*, 108.

¹¹³ *A. a. O.*, 124; cf. XVII = S. 134.

¹¹⁴ *A. a. O.*, 108.

Salutati arrives at this path-breaking result, as mentioned, in his defense of the merits of legal knowledge over medical [knowledge]. The debate over the epistemic value of the different disciplines captivated several Humanists of the 14th and 15th centuries, and in its framework views were presented that have to do directly or indirectly with the new evaluation of the significance of the *certitudo obiecti* for knowledge. The interesting point here is not whether this or that Humanist considers this or that discipline to be epistemically superior, but which arguments and criteria he uses. Thus, e.g., Bruni's way of looking at things does not differ essentially from Salutati's, although Bruni appreciates jurisprudence less than the *studia humanitatis*, specifically rhetoric.¹¹⁵ For Bruni understands jurisprudence in the narrower sense of *ius civile*, while Salutati means by it something similar to Aristotelian politics¹¹⁶ and thus comes quite close to Bruni's concept of the *studia humanitatis* as science of human life in general. But even if we look more closely at the manner in which, for instance, Giovanni d'Arezzo advocates the superiority of medicine over jurisprudence, we likewise encounter views that burst the traditional metaphysical circle of ideas. Although Giovanni also conceives jurisprudence in the narrower sense, he nevertheless acknowledges that it does not differ fundamentally from medicine with regard to its object, since both disciplines deal equally with man.¹¹⁷ But while laws change from place to place and from time to time, the object is given to medicine once and for all by nature and therefore it is capable of both demonstrative and experimental knowledge. And if jurisprudence occupies itself with external and contingent situations, medicine investigates not only such, but also internal and essential ones. Finally, jurisprudence has to do with inferior and perishable things like property and money, while medicine cares for the body and soul of man, which are worth much more than material goods.¹¹⁸ Here, central Aristotelian views, such as the firmness of the object of knowledge as a prerequisite of science, are transferred from the level of metaphysics to that of physics, which implies an ontological upgrading of this latter; at the same time, the anthropologically oriented criterion of practical utility is mustered to justify a certain form of knowledge. The reinterpretation or misinterpretation of conventional views with the purpose of helping a new worldview attitude to break through constitutes a common phenomenon in transitional periods, and the free use of Aristotelian thought material on the part of Bruni, Salutati, or Giovanni confirms this rule. If now Giovanni, by assuming the scientific superiority of medicine, seems to abandon the just-emerging primacy of the *vita activa* again, he on the other hand shares no less than other Humanists the anthropologically grounded utility criteria, thus the turning away from speculative metaphysics and from the ideal of the contemplative life. But precisely the

¹¹⁵ Letter to Strozzi = Garin (ed.), *Disputa*, 7 f.

¹¹⁶ *De nobilitate...*, XX = S. 170, cf. 158.

¹¹⁷ *De medicinae et legum praestantia* = Garin (ed.), *Disputa*, 86.

¹¹⁸ *A. a. O.*, 86, 88, 94.

anthropological-utilitarian way of viewing things effected, as Salutati's example has shown us, the elimination of the viewpoint of *certitudo obiecti* central in traditional metaphysics. A defender of the contemplative life, Antonio de' Ferrariis, grasped the problem very well from his perspective already then. Metaphysics and the ideal of the contemplative life connected with it, he opined, rest on the *dignitas* of their object, and precisely for this reason metaphysics constitutes a *sapientia*. He who, on the contrary, thinks only of the great multitude of people and their narrow-minded material interests, preaches the superiority of the *vita activa* and cares exclusively about *utilitas*.¹¹⁹

We already mentioned the distinction between *sapientia*, which referred to the highest metaphysical knowledge and equated to Aristotelian *sophia*, and *scientia*, which meant as much as possible knowledge of the natural world and partly coincided with Aristotelian *episteme*. The distinction between these two terms reflected the fundamental separation of ontological levels from one another within traditional metaphysics and implied the precedence of the criterion of *certitudo obiecti*; only the object of *sapientia* constituted an absolutely firm and sure object of knowledge. The gradual blurring of the distinction between *sapientia* and *scientia* thus favored in the long run the ontological upgrading of the object of *scientia*, i.e., the sensible world, and at the same time the displacement of the criterion of *certitudo obiecti* in favor of the criterion of *certitudo modi procedendi*. The downgrading of metaphysical *sapientia* also took its start from the contrast between the philosophical and the Christian meaning of the term, as we encounter this latter in Augustine, for whom true *sapientia* is grounded not in reason but in faith. The Augustinian view of *sapientia* could therefore be opposed to *sapientia* in the sense of rational metaphysical knowledge and thereby undermined the Aristotelian and partly also Thomistic hierarchy of forms of knowledge,¹²⁰ which could not remain without consequences also with regard to the relationships between *sapientia* and *scientia*. Similar consequences for these same relationships also resulted from the assumption of the primacy of the active life, whereby practical wisdom, i.e., *prudentia*, was opposed to theoretically set *sapientia*; this juxtaposition begins early, as we saw in the example of Salutati, and gradually becomes a commonplace that predominates in the moral philosophy of the 16th century.¹²¹ Undermined by the persistent influence of Fideism and the new primacy of the *vita activa*, the distinction between *sapientia* and *scientia* finally collapses, but in such a way that *sapientia* emerged from this process as the loser and *scientia* as the winner. Before *scientia* prevailed all along the line, however, by assuming the sense that mathematical

¹¹⁹ *De dignitate disciplinarum* = Garin (ed.), *Disputa*, 144, 146.

¹²⁰ On the differences between the Augustinian and the Aristotelian-Thomistic view of *sapientia*, see Rice, *Wisdom*, 4 ff., 15 ff.

¹²¹ On the preference given by French Humanists of the 16th century, such as Budé and Ronsard, to *prudentia* over *sapientia*, see *a. a.*, 150 ff.

natural science of the 17th century attributed to it (i.e., the sense of rational and at the same time experimental investigation of the sensible world, of This-World), the elimination of the distinction between *sapientia* and *scientia* often took place in an indirect and contradictory manner. Sometimes the concept of *sapientia* expanded in such a way that it could encompass (encyclopedic) knowledge about all things—divine and human, natural and historical—whereby its specific difference from *scientia* was lost; sometimes *scientia* was promoted to the status of *sapientia*, specifically through the spiritualization of the sensible world in a spiritualistic perspective, so that this world too could become the object of purely intellectual knowledge inseparable from the transcendent [knowledge].¹²² Be that as it may, the elimination of the distinction between *sapientia* and *scientia* reflected the weighty fact that the traditional separation of metaphysical levels from one another no longer possessed the old self-evidence. Therefore, *certitudo obiecti*, this cornerstone of ancient and Christian metaphysics, also had to be finally displaced and shattered.

c. Lorenzo Valla: The Refutation of Metaphysics on the Basis of Rhetorical-Linguistic Criteria

The central significance of the complex of ideas discussed so far for the critique of metaphysics in the 15th and 16th centuries shows itself in Valla's argumentation, in which the anti-intellectualist attitude (primacy of the will and of the *vita activa*) goes hand in hand with a linguistic critique of fundamental scholastic-Aristotelian concepts. He who places the intellect above the will is in error, writes Valla, and as proof he cites sinful deeds, which would be impossible if the intellect had the will incessantly under control. From the will proceeds both virtue and sin, while the intellect in itself can be neither good nor bad.¹²³ Therefore, the assumption of the primacy of the speculative life, which presupposes an active domination of the other faculties by the intellect, must also appear untenable. Intellectualistic philosophy is the result of alienation from practical life as crystallization of a will. Although Valla, like other Humanists, distinguishes for understandable polemical reasons the genuine Aristotle from his scholastic-Aristotelian interpretation,¹²⁴ he nevertheless accuses him, whenever he turns directly against him, not least of the abstract-intellectualistic character of his philosophy, which is attributable to Aristotle's personal inexperience in political or martial action¹²⁵. The Aristotelian and generally philosophical assertion that pure theory makes a god out of man constitutes for

¹²² On the various ways of blurring the difference between *sapientia* and *scientia*, see *a. a. O.*, passim.

¹²³ *Disputationes Dialecticae*, I, 10 = *Opera*, 664, 667.

¹²⁴ Also Valla shares the view that the Aristotelian writings have not been handed down to us in their genuine form; the Latin translations have likewise contributed to twisting the meaning of these writings, see *Disp. Dial.*, Praefatio = *Opera*, 644.

¹²⁵ *A. a. O.*.

Valla mere self-praise of philosophers.¹²⁶ Augustinian contempt for philosophical constructions resonates here once again. Valla expresses, just like many other Humanists before him, his sympathy for the unadulterated theology of the Church Fathers—among others Cyprian, Ambrose, and Augustine are named—and emphatically disapproves of the Thomistic coupling of theology and metaphysics. By appealing to Paul's statements against philosophy (e.g. Col. 2, 8), he regards this coupling as an artificial and illegitimate innovation, which was rejected by the older theologians both for pragmatic reasons (rational metaphysics cannot grasp divine things anyway) and for linguistic reasons, since the concepts of the Greek language cannot be translated into Latin; precisely because the old theologians were masters of Greek, they never dared to commit the linguistic monstrosities of the newer ones¹²⁷ and avoided terms like *ens*, *entitas*, or *quidditas*.

These views had already been represented in more or less similar form by other Humanists, but Valla's linguistic analysis of metaphysical conceptualization was nevertheless original and path-breaking in many respects. Such an analysis could, of course, take place for its part only on the basis of the rehabilitation of rhetoric described above. The practical-utilitarian attitude associated with this rehabilitation inspires Valla's praise of common, generally understandable, and socially useful language over against the abstract, artificial, and socially hardly usable language of philosophy, specifically of dialectic and logic. Philosophy and dialectic, Valla opines, should not deviate from common linguistic usage.¹²⁸ Although he admits that dialectic is primarily *scientia sermocinalis* [science of speech] and logic *scientia rationalis* [rational science], that the former is thus closer to everyday language (*sermo*) than the latter, which establishes the strict rules of scientific argumentation, he nevertheless wants to connect both as closely as possible, for he considers both equally as forms of human communication by means of language. He thus recurs to the derivation of "logic" from *λόγος*, understanding by *λόγος* not *ratio* or the formally logically flawless procedure of thought, but *sermo*, the living language; logic is for him, just like dia-lectic, a dia-logue in which at least two persons participate and which must therefore be defined as *duorum sermo* [speech of two], while an expression like *duorum ratio* would make no sense.¹²⁹ In contrast to the Nominalists' adherence to Aristotelian distinctions, Valla thus strives for the unity of logic and rhetoric, whereby the former is to cease being the exclusive organ of critical thought work; critical thought work is rather to be accomplished by the natural mechanisms of language being able to unfold unchecked—which in turn implies

¹²⁶ *A. a. O.*, I, 8 = *Opera*, 660.

¹²⁷ *Encomium*, 394.

¹²⁸ *Disp. Dial.*, I, 3 = *Opera*, 651.

¹²⁹ *A. a. O.*, III, 1 = *Opera*, 732.

that natural language usage must *eo ipso* finish off every metaphysics (see below). In Valla's view, dialectic becomes an easy and simple matter if it links up again with the decisive historical and social dimension of *sermo*, if it approaches grammar and the art of persuasion anew. Dialectic and rhetoric have, after all, important commonalities: both aim to refute counter-positions, and both use syllogisms and arguments, albeit in different forms respectively.¹³⁰ Scholastic abstractions have disturbed the natural relationship between *verbum* and *res*, and the return to *res* is now to be achieved precisely through the linguistic and pragmatic analysis of *verbum*, which dissolves every false generalization and mystification into thin air. The analysis of words amounts to the discovery of things. It is only seemingly paradoxical that here the return to things is demanded while the analysis moves exclusively in the field of language and the question of Being is not posed at all. For from Valla's view, *res* (and that means: living reality in its immediate human expression) coincides with language, if one only cleanses it of scholastic distortions and additions; and since these arose not least in the attempt to build a metaphysics, the return to the clarity and naturalness of language must necessarily mean the return to things through the turning away from metaphysics. If language is understood and used correctly, it refers by its nature to a reality that has very little to do with the Being of metaphysics; metaphysics can thus only spring from an abuse of language.

We understand now why Valla makes the precision of thought so emphatically dependent on the empathetic cultivation and correct use of language; the errors even of the greatest thinkers are to be ascribed to the neglect of language.¹³¹ The most elementary criterion of correct language use is, however, adherence to grammatical rules, and Valla blames metaphysicians for having formed their basic concepts by violating grammatical rules, by deriving *entitas* from *ens*, *quidditas* from *quid*, and *identitas* from *idem*.¹³² Only the word *res*, however, possesses genuine ontological weight and true grammatical and logical generality, which can contain every form of *realitas* within itself. Therefore, all *transcendentalia* can be subsumed under "*res*", become its attributes, and thereby shed their fictitious ontological reference. The concepts *ens*, *aliquid*, *unum*, *verum*, *bonum* thus prove to be special determinations of "*res*" and can be paraphrased as follows: *ens* = *res quae est*, *aliquid* = *aliqua res*, *unum* = *una res*, *verum* = *vera res*, *bonum* = *bona res*. Every participle and every adjective are transformed into the corresponding verb and the corresponding relative pronoun; the expression *bona res* thus forms only a paraphrase of *res quae bona est*, which in turn results from the analysis of *bonum*, just as the sentence *homo qui legit* represents the analytic form of *homo legens*.¹³³ Valla turns particularly vehemently against the abstract nouns ending in *-itas* popular with the Scholastics, which likewise, as he shows, stem

¹³⁰ A. a. O., II, Praef. = *Opera*, 693.

¹³¹ A. a. O., III, 14 = *Opera*, 750.

¹³² A. a. O., I, 3 = *Opera*, 652.

¹³³ A. a. O., I, 2 = *Opera*, 646 f.

from adjectives and can be paraphrased in the described manner. In the transformation of adjectives into nouns, he scents the danger of an abstract hypostatization of things that actually belong in the realm of human action (thus *bonum* means: *bona res*, and this in turn: *bene facere*).¹³⁴ Substantivization is not objectification, but rather a hiding of the living human and practical root of a word behind an imposing abstraction.

Valla also deploys language analysis when it is a matter of breaking the backbone of scholastic-Aristotelian metaphysics, i.e., the system of categories. The first and fundamental metaphysical category was rendered in Latin by Boethius with the word *substantia*, which in reality means something different than the untranslatable participle ὄν; a disorientation of the entire Latin-speaking philosophical literature was the result.¹³⁵ This circumstance, in connection with the vagueness of the Aristotelian term οὐσία—which means sometimes the *τί ἥν εἶναι*, sometimes a general [term] or a genus, sometimes form or matter, sometimes the composite of both¹³⁶—produced the incurable conceptual unclarity of the Peripatetics and gave rise to the misleading synonymy of *substantia* and *essentia*. Valla proposes to use *substantia* synonymously with *res*, specifically in the sense of the common permanent carrier of several attributes, as indeed the etymology of the word suggests; *essentia* should for its part express matter in its contrast to form.¹³⁷ *Substantia* thus becomes the inseparable unity of *essentia* and *qualitas*, which in turn represents a function of *forma* as the genetic cause of the specific quality of a thing. Valla attaches several meanings to the concept of *qualitas*¹³⁸ and thus makes it possible to replace the system of ten Aristotelian categories with three comprehensive genera (*summa genera*), i.e., *substantia*, *qualitas*, and *actio*, using the concept of *actio* simultaneously.¹³⁹ Under the latter two, the remaining seven Aristotelian categories or accidents are subsumed partly with linguistic, partly with pragmatic arguments.¹⁴⁰

¹³⁴ *A. a. O.*, I, 3 = *Opera*, 651.

¹³⁵ *A. a. O.*, I, 6 = *Opera*, 653 f.

¹³⁶ *A. a. O.*, 655.

¹³⁷ *A. a. O.*, 656.

¹³⁸ Besides the sensory qualities, which are further subdivided, there are the moral-psychological (good and evil, joy and suffering, pleasure and pain), those that signify relation (series, order, difference or similarity, necessity, cause), and those that indicate super- or subordination within the logical hierarchy (genus, species, part, whole). See *a. a. O.*, I, 13 = *Opera*, 674.

¹³⁹ *A. a. O.*, I, 13 = *Opera*, 673. Already Occam had assigned a preferential position to *substantia* and *qualitas* within the system of categories, see *Summa logicae*, I, 40 = S. 34 f.

¹⁴⁰ *A. a. O.*, I, 17 = *Opera*, 680 ff. Thus *passio* (the Aristotelian πάσχειν) is transformed into *actio* by paraphrasing *pati* with *passionem sentire*.

By binding *substantia* to *forma* as concrete *qualitas* and summarizing the nine accidents into two, Valla drastically simplifies the metaphysical conceptualization current at the time and at the same time undertakes an indirect but far-reaching modification of the content of scholastic-Aristotelian metaphysics. First, he makes an abstract grasping of substance and thus the establishment of a hierarchy of purely intelligible substances impossible; and furthermore, he eliminates the scholastic ontological distinction between *formae substantiales* and *formae accidentales*, which not only considerably complicated the logical structuring of metaphysics but also underpinned its teleology inspired by theology. Similar consequences resulted from Valla's rejection of the Aristotelian juxtaposition of *potentia* and *actus*. We will be able to assess the significance of this rejection better if we remember that through the mentioned juxtaposition the transcendence of God as *actus purus* was grounded vis-à-vis the *contingentia* of nature; for material and changeable nature must remain forever imperfect and incomplete, thus a sum of possibilities to be fulfilled, and stand in varying degrees under the sign of *privatio*. In the same sense, the juxtaposition of *actus* and *potentia* was connected with the central scholastic distinctions between existence and essence, matter and form, etc. The inseparable unity of substance and quality, as Valla advocated it, had already made the Aristotelian doctrine of *privatio* objectless; this same position is now corroborated by the refutation of the doctrine of the potential, which Valla undertakes by appealing to normal language usage. How could someone—he asks—assert that a chest is potentially in a piece of wood? To what should this "potentially" refer, if it can be attributed neither to the wood nor to the craftsman, who indeed makes the chest but does not create out of nothing? The wood can assume several shapes without there being a necessary connection between actual shape and potential shapes. Therefore, everyday language is much more precise when it says that a chest can be made out of the wood, and not that the wood is a potential chest; the Latin language expresses this through the ending *-itas*. Valla thus demands the adaptation of our theoretical views to the natural sense as it crystallizes in common language usage.¹⁴¹

If the transition from *potentia* to *actus* is abolished, then for Valla only the transition from concrete *actiones* to concrete qualities remains, which generates and at the same time constitutes the eternal motion in the world.¹⁴² In place of the fixed metaphysical hierarchy steps the horizontal coexistence of things, qualities, and acts. Human language refers to these ontological givens in varying ways,¹⁴³ and if it does not do so, then confusion and aberrations arise, which reproduce and multiply infinitely. The abolition of the Aristotelian juxtaposition of *actus* and *potentia* thus means finally that there is not on the one side a complete and exemplary world graspable in the form of a logical-metaphysical construction, while on the other an incomplete

¹⁴¹ A. a. O., I, 16 = *Opera*, 679.

¹⁴² A. a. O., 679 f.

¹⁴³ Cf. a. a. O., I, 17 = *Opera*, 686 f.

world in need of completion, which must be completed with the help of some teleology. The world is as it is, it is in eternal motion and thrives in eternal fullness. Indeed, Valla tends to view the world as an organic, living unity, as shown *inter alia* by his critique of Aristotelian anthropology and zoology.¹⁴⁴ But also other aspects of his thought point to new orientations and valuations. It concerns here above all the turn from ontology to epistemology, which, as said, paves the way for the new primacy of *certitudo modi procedendi* over *certitudo obiecti*. Valla emphasizes again and again the decisive share of the subject in the formation of knowledge, e.g. when he writes that truth and error are equally functions of our thinking and that we cannot assume the subjective origin of the latter without having to admit the subjective origin of the former at the same time.¹⁴⁵ Valla also views qualities as subjective, which, as he opines, we consider objective only because we name an object instead of the respective sense, e.g., speak of a soft or white thing and not of the corresponding tactile or visual sensation.¹⁴⁶

Just as he opposes normal everyday language to the artificial conceptualization of metaphysics, Valla also opposes the unconstrained course of natural human thinking to the artificial thinking of Aristotelian syllogistics. Complicated syllogistic rules are superfluous if even children possess the spontaneous ability to form correct syllogisms.¹⁴⁷ The great model of natural thinking remains, of course, rhetoric, and Valla's critique of Aristotelian syllogistics is borne by the wish to embed the mechanisms of logic anew in language as a practical means of social intercourse. From this view, the syllogism represents only a kind of speech (*oratio*), which is generally defined as a harmonious composition of words whose meaning was established by their author.¹⁴⁸ Valla admits the qualitative difference of the syllogism from rhetorical argumentation, since the goal of the former is demonstration on the basis not of probable, but of necessary arguments, which must be presented in the form of the major, minor, and conclusion.¹⁴⁹ However, he does not accept that truth results from the formal correctness of the syllogism, for he regards it as a function of the correct use and placement of all components of language within the major and minor premises.¹⁵⁰ To secure the linguistic and substantive soundness of the introductory sentences of the syllogism, however, recourse to the means of proof of rhetoric is required. The formal independence of the syllogism is preserved (even if Valla drastically reduces the number of Aristotelian syllogism forms), but at the same time its components are selected and tested on the basis of rhetorical criteria. In the same sense, Valla

¹⁴⁴ On this aspect of Valla's thought see Saitta, *Il pensiero*, I, 224 ff.

¹⁴⁵ *Disp. Dial.*, I, 2 = *Opera*, 651.

¹⁴⁶ *A. a. O.*, I, 14 = *Opera*, 684 f.

¹⁴⁷ *A. a. O.*, III, 2 = *Opera*, 734.

¹⁴⁸ *A. a. O.*, II, 1 = *Opera*, 694 (*vocum ex institutione artificis significantium congrua complexio*).

¹⁴⁹ *A. a. O.*, III, 2 = *Opera*, 732.

¹⁵⁰ *A. a. O.*, III, 2 = *Opera*, 733.

opposes a rhetorical view of induction to the logical one. He rejects the traditional definition of *inductio* as progress from individual things to the universal with the argument that the transition from the former to the latter is impossible, since the universal cannot be composed by a mere summation of individual things. *Inductio* can therefore be of use only in a consultative sense, and thus it stands close to rhetorical *exempla*.¹⁵¹ In discussing the positions of the humanist rhetoricians of the 16th century, we will see that this renewal of Aristotelian logic through the conceptualization and methodology of rhetoric not only withdrew the logical supports from traditional ontology but also contributed significantly to the formation of the modern concept of scientific method.¹⁵²

3. The Double Function of Agnosticism

From the examples of Petrarca and Salutati, we could establish that agnosticism, i.e., the doctrine of the limits of human knowledge and of its inability to rationally grasp the essence and the ultimate cause of things, was the first significant systematic anti-metaphysical position of the modern age. We may speak of the modern age here because in the humanist authors, agnosticism does not (only) constitute the reverse side of Fideism, but also serves to ground the new primacy of the *vita activa*. The insurmountable ignorance regarding the Beyond is (often) interpreted as a command to turn to the Here [This-World]; and the incurable sterility of the speculative life drives one to prefer the active [life] as well as to overthrow the traditional relationship between *sapientia* and *prudentia*. Nevertheless, these approaches, especially among the earlier Humanists, still remain closely connected with the fideistic attitude as it was kept alive by the Augustinian tradition and renewed by Nominalism. In this section, we now want to trace a development that took place primarily in the 16th century and was decisive for the further course of the critique of metaphysics. It concerns the open split of agnosticism into a fideistic and a profane wing, whereby the former combats the mixing of rational knowledge of Being and faith with the intention of preserving the purity of faith, while the latter renounces the knowledge of the Beyond rather with the concern of devoting itself all the more intensively to the Here, from which an upgrading of the sensible world and at least a long-term undermining of the old ontological hierarchy results. Precisely this turn to the Here constitutes the specific feature of profane agnosticism compared to theological metaphysics as well as fideistic theology: for these two were equally oriented toward the supersensible and immutable Beyond, however much they might dispute over the possibility of rational metaphysical knowledge. The rediscovery of Sextus and Cicero in the first half of the 16th century¹⁵³ gave

¹⁵¹ *A. a. O.*, III, 16 = *Opera*, 757 ff.

¹⁵² See below Sect. 4 b-4 e of this chapter.

¹⁵³ On the history of this rediscovery see the introductory chapters in Popkin, *History of Scepticism*, and Schmitt, *Cicero Scepticus*. Schmitt (p. 8) rightly rejects Popkin's view that in the 16th century a precise

important impulses to the debate of that time on agnosticism and skepticism,¹⁵⁴ but it was neither its cause nor did it have anything directly to do with the split of agnosticism into a fideistic and a profane direction, especially since in the early period many connoisseurs of ancient skepticism remained Fideists and harnessed its arguments for fideistic purposes. But as soon as profane skepticism set about articulating itself systematically and appeared as a visible danger to theology, many theologians had to separate themselves from every version of skepticism and seek guarantees for faith in metaphysics; it concerns, incidentally, roughly the time in which Thomism becomes the quasi-official Catholic ideology. Profane skepticism is thus rejected by the fideistic as well as by the theological-metaphysical side. This ambivalent constellation outlines itself *mutatis mutandis* already in the circles of Florentine Platonism, where two different views on the possible relationships between pagan philosophy (metaphysics) and theology appear: the ones propose their reconciliation and their more or less free mixing (M. Ficino, Giovanni Pico della Mirandola, Fr. Patrizzi), the others advocate their strict separation from one another (Gianfrancesco Pico della Mirandola, a nephew of Giovanni). The former of these two tendencies interests the history of metaphysics, the latter the history of the critique of it.

Gianfrancesco Pico, who unfolds his literary activity around 1500, does not yet fight against the specter of profane skepticism, and therefore he can combine his agnostic critique of metaphysics with his fideistic attitude unconcernedly. He stands simultaneously under the influence of the Augustinian tradition¹⁵⁵ and the work of Sextus.¹⁵⁶ Nevertheless—and herein the first fideistic reservations against skepticism already announce themselves, which will later turn into mistrust and disapproval—he praises the Skeptics above all because they throw the pride of the philosophers into the dust.¹⁵⁷ He refers to the critique of metaphysics of the ancient Skeptics to demonstrate the invalidity of non-Christian philosophical theology; incidentally, he defines metaphysics not only as *prima philosophia*, but also as *gentium theologia* [theology of the heathens], and this means that metaphysics can only be a pagan philosophy, whereas Christian theology does not represent or need not represent such a metaphysics—which is why it also

distinction was made between Academic and Pyrrhonian skepticism. In reality, the skeptical current remained as conceptually vague as it was strong. For this reason, we use the terms "Agnosticism" and "Skepticism" largely synonymously in this analysis.

¹⁵⁴ On the deeper reasons for the emergence of skepticism in the modern era see Kondylis, *Aufklärung*, 124 ff.

¹⁵⁵ He is even influenced by extreme representatives of fideism such as Savonarola, see Schmitt, *Gianfrancesco Pico*, 34 ff.

¹⁵⁶ *A. a. O.*, 49 ff.

¹⁵⁷ *Examen Vanitatis Doctrinae Gentium et Veritatis Disciplinae Christianae*, III, *Opera*, 1005 f.

cannot be hit by skeptical arguments.¹⁵⁸ Accordingly, every mixing of Christian religion and rational knowledge, of revealed theology and human metaphysics, is rejected,¹⁵⁹ whose representatives err so frequently and lie so often.¹⁶⁰ Gianfrancesco concretizes this his anti-metaphysical attitude through a thorough critique of the Aristotelian doctrine of substance and its knowability. For a better understanding of his critique, we must remember that Aristotle's ambivalent position between intellectualism and sensualism enabled two different interpretations of his philosophy (so that its relationship to Platonism could be judged differently and the historical effect of Aristotelianism in general could turn out contradictory)¹⁶¹ and accordingly also permitted two different refutations of the Aristotelian thesis of the knowability of substance. Those who fought against scholastic-Aristotelian intellectualism from an empiricist perspective considered the Peripatetic claim to complete knowledge of substance to be unfulfillable precisely because of its intellectualistic grounding; those, on the other hand, who rejected Aristotelian empiricism because they harbored intellectualistic or rather spiritualistic sympathies, but at the same time wanted to separate theology from metaphysics, opined that under Aristotelian presuppositions substance would be unknowable precisely because of the empirical component of Aristotelianism considered decisive. To these latter belonged Gianfrancesco.

As a methodological introduction to the denial of the knowability of substance, a critical analysis of the Aristotelian *ars demonstrandi* and its weaknesses serves him. Gianfrancesco knows about the just-mentioned ambivalence of Aristotelian philosophy and depicts in detail the palinodes of the Peripatetics on the question of the extent of the dependence of the intellect on sense data as well as on the question of the share of these latter in the formation of judgments.¹⁶² He basically holds Aristotle, regardless of his epistemological vacillations, to be a sensualist, since he assumes that the elementary forms of thought cannot exist without images (*phantasmata*), although they are not identical with these images.¹⁶³ The Aristotelian demonstration must therefore ultimately remain reliant on images and thus on the senses, which, however, as Gianfrancesco tirelessly repeats, are inconstant, since they differ from person to person and from moment to moment—quite apart from the fact that the depicted objects are for their part changeable. Gianfrancesco accepts the possibility of the correction of one sense on the basis of the findings of another as well as that of the composition of an idea on the basis of several sense impressions. Nevertheless, he adds, this is not enough. For universals,

¹⁵⁸ A. a. O., III, 2 = *Opera*, 982 ff.

¹⁵⁹ *De studio divinae et humanae philosophiae, Proemium* = *Opera*, 4; vgl. I, 2 = *Opera*, 7 f.

¹⁶⁰ A. a. O., II, 3 = *Opera*, 31 f.

¹⁶¹ Kondylis, *Aufklärung*, 82 f. (with bibliographical references).

¹⁶² *Examen Vanitatis*, V, 2 = *Opera*, 1071, 1075.

¹⁶³ A. a. O., 1073.

without which no ultimate ontological proofs can be conducted, cannot be formed on the basis of some, but only of all individual things; no sensory perception is capable, however, of grasping all individual things, and therefore universals cannot be formed under empiricist presuppositions.¹⁶⁴ Moreover, Aristotelian demonstration must fail already because of the impossibility of definition, which according to Aristotle necessarily rests on the knowledge of the genus and the specific difference. This latter, however, is not (always) registered by the senses; should the senses in turn be capable of grasping specific differences of genera and species, why could they not do the same with regard to the specific differences of substances? And if these can be grasped only by the intellect, who can then guarantee the reliability of an intellect that operates on the basis of data from senses which by nature have no cognitive access to substances?¹⁶⁵

Since Gianfrancesco contests the possibility of definitions and demonstrations on the sensualistic basis of Aristotelianism, he must naturally also deny the possibility of a knowledge of substance through the knowledge of its accidents on the part of the senses. According to the view of Aristotle, he writes, the senses cannot go beyond the accidents to penetrate into the interior of the substance; how is the image (the phantasm) of the substance supposed to arise in the intellect under these circumstances? If, again, this image is a work of the intellect itself and thus does not coincide with the image provided by the senses, then the Aristotelian assumption that thought operations rest on sensory images does not hold. Recourse to the senses thus becomes unavoidable, but precisely therein lie the difficulties. For even if the intellect is reliant on the images, it must grasp something more and something other than what the senses offer it in order to proceed to the knowledge of substance. If we wanted to assume that the image of the accidents becomes the image of the intelligible substance as soon as it is illuminated by the light of the intellect, then a disproportion of cause and effect results: the accidents as cause are namely not sufficient to call the image of the substance into life, since the substance coincides neither with one accident nor with several. We thus return to the problem of the dependence of the intellect on the senses and the reliability of these latter.¹⁶⁶

Fideistic is also the agnosticism of Vives, who incidentally ascribes the insurmountable weakness of the human cognitive faculty to the Fall.¹⁶⁷ The long and persistent struggle of the Augustinian tradition and of Nominalism against Arab-Aristotelian philosophy is reflected also in the work of the pious Humanist, when he opines that the Aristotelian God, this thought of

¹⁶⁴ *A. a. O.*, 1074.

¹⁶⁵ *A. a. O.*, V, 7 = *Opera*, 1120.

¹⁶⁶ *A. a. O.*, V, 10 = *Opera*, 1142 f.

¹⁶⁷ *De prima philosophia*, I = *Opera*, III, 189.

thought structured logically flawlessly, is a mere factotum of necessary laws, incapable of evoking faith and devotion in the human heart.¹⁶⁸ The immediate religious experience is thus opposed here to metaphysics as logically articulated knowledge or as cool intellectual grasping of an existentially indifferent *ens rationis*. Philosophers, writes Vives, neglect the decisive question of self-knowledge, turn to the investigation of things that lie beyond all thinking, and define the same in all arrogance; ignorance and arrogance are indeed their two characteristic vices.¹⁶⁹ Aristotle has not sharpened their thinking, but darkened it through his superfluous abstract subtleties. The Scholastics talk indeed of nature etc., but understand much less of it than, e.g., a farmer or a craftsman, and therefore they replace nature with a completely fictitious entity, while they lose themselves at the same time in things that God never created, such as the *formalitates*, the *ecceitates*, the *realitates*, or the Platonic Ideas. To these monsters, which are incomprehensible even to their own authors, the philosophers attach the name "metaphysics" and consider everyone a "metaphysical genius" who has an inclination for such quirks.¹⁷⁰ Apart from these general anti-metaphysical statements, two points must be held fast here. The elimination of metaphysical questionings means for Vives the primacy of epistemology, since, as he says, we can in no case break through the limits of our knowledge and even when we speak of the existence and the qualities of things, we use the standards of our own thinking.¹⁷¹ With this new evaluation of the cognitive function connects the assumption of the principle *verum factum convertuntur*, which, although not explicitly formulated, can nevertheless be clearly derived from two passages. In one of them, Vives asserts that not man, but God alone is in possession of metaphysical truths, and notes that many things could be known only by their own author.¹⁷² This seems to find its application to the realm of human things when Vives writes that we know only what we put into practice.¹⁷³ In context, this statement means, of course, that not theoretical knowledge but the practical exercise of virtue is of value, but it attains a broader sense if it is understood in the perspective of *verum factum convertuntur*.

There can be no doubt that the Lutheran Reformation is closely connected with the fideistic rejection of metaphysics and even represents one of its intellectual-historical high points, by ruining in its way the Thomistic balance of faith and knowledge, theology and metaphysics. As a result of the Fall, reason is unable to grasp the first principles of Being and the essence of God; its arrogance drives it on the contrary to grasp God at its discretion and thus to degrade or even

¹⁶⁸ *De veritate fidei christianae*, I, 10 = *Opera*, VIII, 81 f.; cf. in general Noreña, *Vives*, 228 ff.

¹⁶⁹ *De causis corruptarum artium*, I, 1 = *Opera*, VI, 183 f.

¹⁷⁰ *A. a. O.*, V, 3 = *Opera*, VI, 190 f.

¹⁷¹ *De prima philosophia*, I = *Opera*, III, 193 f.

¹⁷² *In pseudodialecticos* = *Opera*, III, 40.

¹⁷³ *Satellitium*, § 209 = *Opera*, IV, 63 (*tantum scis, quantum operaris*).

de facto to eliminate him, since reason recognizes higher instances only with difficulty or only seemingly. In Luther's eyes, reason is the whore of the devil. A *theologia naturalis* cannot exist, and the mixing of theology and Aristotelian philosophy must have disastrous effects for the former. The critique of philosophy thus generalizes and extends to all characteristic scholastic views or fine conceptual distinctions, which partly misunderstand, partly ignore, partly mutilate the essential—namely God's grace and its attainment through good works. As already within the framework of Nominalism, so also with Lutheranism, the struggle against intellectualism goes hand in hand with the primacy of the will on the anthropological level. Viewed intellectual-historically, the Reformation thus constitutes a continuation, processing, and mixture of Augustinian tradition, German mysticism of the 14th century, and basic positions of Nominalism, as incidentally the investigation of Luther's intellectual development clarifies.¹⁷⁴

The cited examples outline clearly enough the general physiognomy of fideistic agnosticism and the intentions of the respective authors. Now, however, the intention of many other authors is not so clear, and in many cases it cannot be said with certainty whether the represented agnosticism constitutes the reverse side of a sincere Fideism or aims at the undermining of both rational certainty and the certainty of faith. Such a case is Agrippa, who defended the Christian faith in various writings, but at the same time gave his skepticism such a free and modern-profane expression that some doubt about the sincerity of his faith is unavoidable, even if it cannot be proven. To demonstrate the uncertainty and nullity of every form of knowledge, Agrippa uses some (banal) anti-metaphysical arguments. The object of metaphysics, he writes, are the *transnaturalia*, thus everything that cannot be found in things themselves, which is why it must also be placed above things; but what is supposed to exist outside of matter and separated from it, such as, e.g., the so-called *formae separatae*, can impossibly be ascertained and known. Hence it comes that philosophers dispute not only about what they believe to find in things themselves, but also about their own imaginings.¹⁷⁵ Agrippa dedicates a chapter of his work to the polemic against Aristotelian dialectic (the term is used here too, as usual, synonymously with logic), which in his opinion darkens the facts rather than clarifying them.¹⁷⁶

Profane agnosticism assumes much clearer contours in the representatives of Italian natural philosophy of the 16th century. This has its reasons too. For Italian natural philosophy, despite

¹⁷⁴ Since this question has been sufficiently researched, I limit myself here to some important bibliographical references: Lohse, *Ratio und Fides*, esp. 25 ff., 68 ff.; Scheel, *Luther*, II, esp. 251 ff., 324 ff.; Link, *Das Ringen Luthers*, passim; Hägglund, *Theologie und Philosophie*, passim; Seeberg, *Die religiösen Grundgedanken*, passim; cf. Rice, *Wisdom*, 124 ff.

¹⁷⁵ *De incertitudine et vanitate scientiarum atque artium*, LIII = *Opera*, II, 115.

¹⁷⁶ *A. a. O.*, VII = *Opera*, II, 33.

its relationship to the Hermetic tradition and its differences from the mathematical natural science of the 17th century, contributed significantly to the formation and dissemination of the idea of a unified and homogeneous nature, which could also be grasped uniformly. From the moment nature is viewed in this way, it is also considered worthy of becoming the object of the highest theoretical efforts, which results in the loosening or even the dissolution of the traditional binding of highest theory to the sphere of transcendent spirit. This sphere is, of course, not (yet) openly taken under fire, but the shift of interests is so striking that the frequent and stereotyped confessions of faith of the new natural philosophers to Christianity cannot hide the fact that, despite their nominal agreement with the fideistic grounding of agnosticism, they indulge in a skepticism that gradually extends also to the doctrines of faith; that agreement has therefore fundamentally the character and function of an ideological alibi within a society in which the Christian-ecclesiastical worldview is still undisputed and practically all-powerful. The—no matter whether sincere or obligatory—public confession to the revealed truths permits the intensification of the polemic against their mixing with reason; decisive remains, however, that reason is neither condemned nor abandoned, but its exclusive use and application to the scientific grasping of the sensible world is demanded. In contrast to the traditional metaphysical hierarchy, the sensible world is thus considered worthy and capable of attracting the theoretical attention of reason to itself or even monopolizing it. Of course, this concerns a weakened reason, one namely that can no longer rise above the sensible. This weakening is, however—at least in the eyes of the opponents of traditional metaphysics—intentional and only apparent; in reality, it means the liberation of reason from the obligatory dwelling on fictitious and useless things, which only led to the waste of its powers. As soon as reason decides for the Here [This-World] as the space for the unfolding of its activity, it has experience as an ally and at the same time as the cornerstone of the theoretical building erected by it: the world of experience is the only interesting object for reason, and empirical knowledge confirms in turn the results of this same reason.¹⁷⁷

We understand now on the basis of which criteria and for what reasons Leonardo despises the statements of those hollow *speculatori* whose abstract logical arguments cannot be proven by experience.¹⁷⁸ The cause of the necessary failure of such theoretical undertakings is, of course, the wish underlying them to exceed the limits of experience. In verbal agreement with the Fideists, Leonardo denounces human arrogance, which drives philosophers to write about things that are inaccessible to the human intellect and cannot be proven on the basis of nature. The fundamental difference of Leonardo's attitude from Fideism becomes clear, however, when in the same place not only the appeal of metaphysicians to miracles, not only their sophistry,

¹⁷⁷ On the double meaning of the rehabilitation of sensibility in the New Times and the corresponding double meaning of the cooperation of intellect and experience, see Kondylis, *Aufklärung*, 42 ff., 98 ff.

¹⁷⁸ *Tagebücher*, 20.

but also their neglect of mathematical sciences is criticized, which alone can mediate a true knowledge of things.¹⁷⁹ It seems astonishing to Leonardo that for centuries one has ignored or misinterpreted what is capable of a clear recognition and proof, while on the contrary one has searched for definitions of things which, like e.g. the soul, cannot be demonstrated.¹⁸⁰ It is evident that here the degree of certainty of knowledge is considered more important than the dignity of the object of knowledge, and Leonardo says this also unmistakably: *Ma tu che vivi di sogni ti piace più le ragion sofistiche e barerie de' parlari nelle cose grandi e incerte, che delle certe, naturali e non di tanta altura* [But you who live on dreams are more pleased by the sophistic reasons and tricks of speaking in great and uncertain things, than by those of certain, natural, and not so high things].¹⁸¹

Telesio likewise pleads for the abandonment of the ideal of omniscience in the absolute metaphysical sense, especially since only untenable constructions can result from such endeavors. Some people, writes Telesio, who want to compete with divine wisdom, dare to seek the principles and causes of Being through their reason, and in doing so erect fantastic worlds in an arbitrary manner, imagining they have found what they can never find. Thus they attribute to things not their true properties, but those suggested by their own reason. To the high-flying speculations, Telesio wants to oppose a more modest and sober consideration of the world, he thus proposes the limitation of research to phenomena that can be attested either by the senses or deduced analogically on the basis of such testimonies.¹⁸² Having defined the goals and limits of human knowledge in this way, Telesio also undertakes a revision of the traditional concept of *sapientia*,¹⁸³ which he detaches from the ideal of the speculative life. He does not overlook, of course, that the human spirit tends toward the knowledge of things that have nothing to do with the needs of self-preservation and well-being and moreover exceed its capabilities.¹⁸⁴ Nevertheless, he considers attempts to research unreachable areas to be nonsense.¹⁸⁵ True wisdom must remain bound to the preservation of man and to his life needs.¹⁸⁶

Another significant representative of Italian natural philosophy presents the positions of profane agnosticism even more extensively: Cardano. On the question of the possibilities and limits of knowledge, he writes, there are three theories, namely the Peripatetic, which believes in

¹⁷⁹ A. a. O., 36.

¹⁸⁰ A. a. O., 14.

¹⁸¹ A. a. O., 94.

¹⁸² *De rerum natura*, Proemium = I, 5 f.

¹⁸³ See above Sect. 2 b, last paragraph.

¹⁸⁴ *De rerum natura*, IX, 6 = III, 208.

¹⁸⁵ A. a. O., IX, 7 = III, 212.

¹⁸⁶ A. a. O., IX, 6 = III, 208, 209.

universal and complete knowledge, the Pyrrhonic, which considers all forms of knowledge unattainable, and the Academic, which regards some things as knowable and some as unknowable. Cardano discusses the argumentations of all three theories, and finally he declares himself for the third; his whole polemic concentrates, however, on the first, while he passes over the second with rather benevolent silence. Even if we wanted to assume that the human race as a whole would one day achieve what the individual can never manage, namely to come into possession of the whole truth, only a part of it [the human race], living in a specific space and a specific time, would again take possession of a specific aspect of the truth, namely that which would correspond to its own finite position within the circle of eternity; a part of humanity—and present humanity as a whole is for its part only a part of humanity in its historical continuity—can thus in its own perspective know only a part of the truth. We draw our knowledge either from the senses or from certain thought principles or from various writings. But the senses do not perceive everything, the thought principles can be combined in different ways, and writings get lost.¹⁸⁷ And if knowledge in the realm of the finite is partial, it remains impossible with regard to the Infinite, for every knowledge rests on an analogy between Knower and Known; no such analogy exists, however, between the finite (the knowing subject) and the Infinite (as object of knowledge).¹⁸⁸ Ignorance can therefore be subdivided into quantitative (i.e., ignorance of fundamentally knowable things, which, however, for various reasons remain provisionally outside the area of our current knowledge) and qualitative (i.e., ignorance of things which by their nature exceed the capabilities of our cognitive faculty). With this hangs together Cardano's distinction between simple knowledge (*cognitio*) and perfect knowledge (*scientia*). The latter is, of course, unattainable, since qualitative ignorance, as just defined, stands in the way of grasping the ultimate causes and principles of Being. We are left with simple knowledge, whose object is the finite sensible world (both in its physical and in its human, i.e., social and practical dimension). The unattainable *scientia* is simpler and clearer as a cognitive structure, since it rests on a system of few principles, but *cognitio*, which is inferior in a qualitative respect, is practically the most important as the only one accessible to us.¹⁸⁹

Cardano thus adopts the Aristotelian distinction between approximate and perfect knowledge—but only to reverse the traditional relationship of the two. This becomes possible, again, because the realm of the highest principles and causes as well as the Infinite are expelled from the sphere of the knowable. Agnosticism brings about considerable rearrangements here too within the traditional metaphysical hierarchy of criteria and values, although the neuralgic substitution of the *certitudo obiecti* by the *certitudo modi procedendi* remains absent for the time

¹⁸⁷ *De arcanis aeternitatis*, I = *Opera*, X, 1 A-B.

¹⁸⁸ *A. a. O.*, IV = *Opera*, X, 4 B-5 A.

¹⁸⁹ *A. a. O.*, I = *Opera*, X, 1 B-2 A.

being. The former is indeed factually eliminated, yet still recognized as the highest ideal of knowledge, and this theoretical concession prevents the primacy of the latter. Nevertheless, the shift in worldview attitude is clear: the partial uncertainty of the knowledge of natural and human things is preferred to the fictitious metaphysical certainty. Access to the ultimate metaphysical truths remains blocked even if one is granted the grace of divine inspiration—an inspiration which Cardano indeed counts among the three sources of knowledge, but practically does not take into account. The two other sources of knowledge are the senses and the innate principles of thought, which show themselves mainly in the form of mathematical axioms. The best possible human knowledge comes about through the correct combination of sense data and thought principles or of empirical and mathematical procedure.¹⁹⁰ Cardano opposes this combination to *scientia*—just as he had opposed the human and natural world to the Transcendent and Infinite. To the extent that he theoretically accepts Aristotelian valuations and classifications, he considers this shift of the ontological and epistemological center of gravity a loss, but his tone betrays that he feels it more as a liberation.

In Cardano too, as already in many Humanists from the two preceding centuries, the confession to agnosticism results in the primacy of the *vita activa* over the *vita speculativa* and of *prudentia* over *sapientia*. Among the various kinds of *sapientia*, *sapientia naturalis* stands at the top, which refers directly to acting (*agere*) and is therefore most precious and indispensable for humans.¹⁹¹ The goal of wisdom is not some dead or abstract knowledge, but long and blessed life.¹⁹² Practical orientation and agnosticism connect with each other also in another respect, and then agnosticism refers no longer to the riddles of Being, but to the concepts of Good and Evil. That is: practical orientation necessarily entails adaptation to concrete unique situations, in which rigid moral truths and their allegedly final knowledge help little. Experience shows, indeed, that there is no undisputed law, no undoubtable custom or opinion.¹⁹³ By turning his epistemological agnosticism at least partially into a moral relativism, Cardano reinterprets the scholastic-Aristotelian concept of *summum bonum* radically and reduces it to a life wisdom that varies according to the needs of the concrete situation. Every human being, he opines, understands the *summum bonum* differently, specifically corresponding to his own goals and possibilities.¹⁹⁴ *Summum bonum* and virtue do not necessarily coincide, since virtue must often combine with an unpleasant self-denial, while vice can provide pleasure. Just as doubtful is the identity of *summum bonum* and *sapientia*, since the latter can mean very different things, by

¹⁹⁰ A. a. O., IV = *Opera*, X, 8 A.

¹⁹¹ *De sapientia*, I = *Opera*, I, 495 A, 492 A.

¹⁹² A. a. O., II = *Opera*, I, 503 B; shortly before in the same column the term *prudentia* is also used.

¹⁹³ *De consolatione*, I = *Opera*, I, 590 B.

¹⁹⁴ *De summo bono* = *Opera*, I, 583 B.

referring sometimes to the ontologically noblest objects (God, soul), sometimes to the most certain (mathematics), sometimes to the most useful (nature and man). Finally, it is unclear whether the *summum bonum* lies in things themselves (one cannot be "objectively" happy without having a subjective feeling of happiness) or in the opinion about things (but how can one be happy under quite adverse circumstances?).¹⁹⁵ — This transformation of agnosticism into moral relativism must be particularly emphasized here. As we shall see, it was an important reason why many (theologians) in the 16th-17th century distanced themselves from pure Fideism and defended rational metaphysical knowledge.

Against the background of his agnosticism, Cardano professes the principle *verum factum convertuntur*: if we cannot know Being, which we do not create, we can at least know our own works, as well as the mechanisms of our knowledge. Metaphysical agnosticism thus amounts to the primacy of epistemology.¹⁹⁶ In closest connection with each other appear agnosticism and *verum factum convertuntur* also in Sanchez, who likewise opines that perfect knowledge comes into consideration only regarding one's own works.¹⁹⁷ Sanchez stands under the influence of ancient and profane as well as fideistic agnosticism,¹⁹⁸ but beyond all erudition, the immediate existential aspect of the detachment from traditional metaphysics shows itself in his work. He had eaten everything the established philosophy could offer him, and vomited everything, since nothing of all that satisfied him; finally he returned to himself, doubting everything and determined to investigate things himself.¹⁹⁹ First, he denies the dependence of the knowledge procedure on the nature of the object of knowledge or of Being. He considers the derivation of compelling demonstrations from eternal and immutable quantities to be nonsensical, for such quantities do not exist—or if they should exist, they are inaccessible to our finite thinking.²⁰⁰ Therefore, the Aristotelian definition of knowledge as knowledge of causes also appears untenable to him, since it requires a regression to the last and at the same time first cause, which lies beyond our possibilities of knowledge.²⁰¹ In Sanchez, as in many contemporary thinkers, the anti-metaphysical attitude thus combines with the view that the essence of God is unknowable.²⁰² His argument that the unknowability of ultimate causes lies in the origin of human knowledge from the senses also contains an anti-Aristotelian point,²⁰³ which implies that

¹⁹⁵ A. a. O., 584 A.

¹⁹⁶ See below Sect. 4 f of this chapter.

¹⁹⁷ *De multum nobili, prima et universali scientia quod nihil scitur* = *Opera*, 30 f.

¹⁹⁸ On his spiritual relations to Sextus and Vives see Senchet, *Essai*, 72 ff., 13 ff.

¹⁹⁹ *Quod nihil scitur* = *Opera*, 2.

²⁰⁰ A. a. O., 10.

²⁰¹ A. a. O., 13 f.

²⁰² A. a. O., 17 f.

²⁰³ A. a. O., 24; cf. 30.

Aristotle and the Scholastics are guilty of an inconsistency when they assume the possibility of rational metaphysical knowledge and at the same time the sensory origin of all knowledge. The paradox with the testimonies of the senses consists in the fact that they are for us the only possible guarantee of certainty and at the same time an inexhaustible source of errors and deceptions.²⁰⁴ To the extent that thinking relies on these testimonies, it must err if the senses have erred.²⁰⁵ But this reliance of thinking on the senses also means that thinking cannot grasp the supersensible, since the senses can convey no idea of it.²⁰⁶ The knowledge of substance must therefore remain defective or unclear, since it is mediated through the perception of its accidents.²⁰⁷ But there can be no other way to its grasping, since Sanchez rejects the Platonic theories about innate ideas, recollection, and the cognitive self-activity and independence of the soul.²⁰⁸

If the limits of knowledge are narrow and insurmountable, then metaphysics consists in the incessant self-reproduction of empty terms and sentences that refer to fictitious objects; to these belong also the Platonic Ideas and the Aristotelian universals.²⁰⁹ But fiction is not only the language of metaphysics, but also that logic on which the scholastic-Aristotelian version of metaphysics wants to support itself. The definition, this cornerstone of Aristotelian logic, by no means contains the essence of the thing, but is merely nominal and moreover thoroughly dependent. For the concepts that make it up must for their part be defined on the basis of higher genera and specific differences until that highest Being is reached, of which no one has a reliable idea. The definition of man contains, e.g., several concepts (Being in general, essence or substance, body, living, animal, Socrates), which are superfluous if they are synonymous, or call into question the unity of man if they are not; should each of them refer to a single aspect of man, then the question must be answered which aspect of man is Being, which body, which living, etc.²¹⁰ But universals do not exist, only individuals,²¹¹ and therefore there can be no science of individuals that would rest on definitions composed of universals. Accordingly, the Aristotelian art of proof is also invalid, since demonstrations must proceed from definitions²¹² —and invalid is also the general Aristotelian view on science as a chain of definitions and demonstrations.²¹³ In reality, it concerns here a chain of empty words, where the preceding ones

²⁰⁴ *A. a. O.*, 36.

²⁰⁵ *A. a. O.*, 29.

²⁰⁶ *A. a. O.*, 30.

²⁰⁷ *A. a. O.*, 33.

²⁰⁸ *A. a. O.*, 11, 12, 41.

²⁰⁹ *A. a. O.*, 2; cf. 6 on the similarity between ideas and abstractions as Universals.

²¹⁰ *A. a. O.*, 4 f.

²¹¹ *A. a. O.*, 20.

²¹² *A. a. O.*, 16.

²¹³ *A. a. O.*, 6.

are supposed to explain the following ones as well as vice versa; the Aristotelian syllogism represents nothing other than an ascending and descending in this chain.²¹⁴ Furthermore, Aristotle sets up abstract syllogism types on the basis of general symbols (like a, b, c) without using concrete terms that would indicate a concrete grasping of things by means of the syllogism. Such a logic can only support an empty metaphysics.²¹⁵ By rejecting both, Sanchez stands on the threshold of a new time, without, however, crossing it: for the same doubt that ruined the old certainties allows no new ones to arise. Sanchez denies the knowability of the Transcendent, but at the same time he considers sensory knowledge unreliable, and therefore he also has heavy reservations against the knowability of nature.²¹⁶

About a year before the appearance of Sanchez's main work (1581), the first two books of Montaigne's "Essais" were published. In the famous twelfth Essai of the second book, the possibility of a rational metaphysics or theology is contested on the basis of a sensualistic epistemology. The senses mark the beginning and the end of our knowledge, opines Montaigne, and the inevitable finiteness of knowledge mediated by the senses blocks the way to immutable Being and permits us only to perceive the transient world of becoming in shimmering and often deceptive perspectives; for this reason, a true science of nature is also impossible. What knowledge denies us is compensated by self-complacent human imagination, which interprets God and nature anthropomorphically.²¹⁷ Charron, the disciple of Montaigne, argues similarly, explicitly referring to metaphysics as a philosophical discipline. Philosophers, he writes, make wisdom a purely theoretical matter, they call it knowledge of the first principles and causes of things and finally also of the divine essence—in short, metaphysics, which has its seat exclusively in the intellect and hardly cares about practical-moral questions. Theologians, it is true, see metaphysics somewhat more practically than philosophers do, since they assume a connection between the knowledge of God and moral action; but theological metaphysics can be revealed just as well as rational.²¹⁸ To ground the primacy of the active life, Charron distinguishes between theoretical knowledge (*science*) and life wisdom (*sagesse*), whereby he

²¹⁴ A. a. O., 7.

²¹⁵ A. a. O., 9.

²¹⁶ A.a.O., 28; cf. what he writes about the unreliability of experiments, a.a.O., 48 f. Coralnik (*Sanchez*, esp. 216 f.) points to the ambivalence of Sanchez's position. Senchet (*Essai*, esp. 44 ff., 98 ff.) attempted to show that Sanchez had in mind an elementary experimental method — that is, that he did not remain with sterile sceptical negation, but rather paved the way for Bacon and Descartes. Creacini also assumes that Sanchez believed in the possibility of a science, although he did not explain its character more closely and also did not devise a scientific method, which his own narrow empiricism prevented him from doing (*Metodo analitico*, 20 ff.).

²¹⁷ *Essais*, II, 12 = I, 661 ff.

²¹⁸ *Petit Traicté de Sagesse* = III, 263 f.; cf. *De la Sagesse*, Préface = I, xxxvii–xxxviii.

concentrates exclusively on the latter.²¹⁹ He considers theoretical systems to be amusing constructions and philosophical mind games without deeper meaning, and furthermore he compares philosophical disputes with religious ones, since both are purposeless and disastrous for social peace.²²⁰

In Cardano's example, we saw how fluid the boundaries between agnosticism and moral relativism were. The same relationship between ontological and moral-philosophical questioning can be established—and indeed even more clearly and comprehensively—in Montaigne and Charron.²²¹ The ease of the transition from agnosticism to moral relativism constituted undoubtedly one of the most important reasons why thinkers who stood suspiciously toward the new profane tendencies distanced themselves from agnosticism, since recent developments seemed to prove that its fideistic utilization was ambiguous and (at least potentially) dangerous. Against the fragile alliance of Fideism and Agnosticism, the more or less orthodox scholastic Aristotelianism now braces itself to defend the reliability of the senses and at the same time the possibility of mental grasping of the ultimate ontological principles. Thus Castellani, e.g., does not believe that the skeptical assessment of the reliability of the senses impairs the knowability of the ultimate principles and causes, which depends exclusively on the work of the intellect. Substances, too, can be known through the intellect and not through the senses, whereby their knowledge guides us in the knowledge of individual things. The empirical knowledge of concrete individuals is thus subjected to the mental grasping of substances, although it is assumed that the latter must follow the former. The senses and the body can, however, be guided by the soul in the same sense as form rules over matter.²²² If Castellani thus advocates the general reliability of the senses against the Skeptics on the one hand, he worries on the other about securing the priority, indeed the autonomy of the intellect, which constitutes the stronger guarantee for him; this shows that the sensualistic aspect of Aristotelianism was still problematic, if not even suspicious. Given the close connection between the reliability of the senses and the reliability of the intellect in the scholastic-Aristotelian view, the former had to be defended somehow, and precisely in the interest of metaphysics. In his commentary on Cicero's "Academicae Quaestiones" (1571), J. Rose opposed the Skeptics with the argument that God could impossibly deceive us by equipping us with unreliable senses; the neglect of the cognitive faculties given by God—regardless of whether of sensory or intellectual character—amounts to blasphemy.²²³

²¹⁹ A. a. O., III, 14 = III, 87 ff.

²²⁰ A. a. O., II, 2 = II, 47, 50 f.

²²¹ Kondylis, *Aufklärung*, 137 ff.

²²² On Castellani see Schmitt, *Cicero scepticus*, esp. 119 ff., 125 ff.

²²³ A. a. O., 146 ff.

The same concern about the moral-philosophical consequences of agnosticism meets us in Sadoletto's work, in which the rehabilitation of rational metaphysical knowledge connects with the rejection of the new primacy of the *vita activa*. It is significant with what emphasis and what malice, one might almost say, the anti-metaphysical-agnostic attitude and immoralism are thrown into one pot. The primacy of the active life, as the critic of philosophy in Sadoletto's dialogue explains it, appears in its vulgarest version, i.e., as blind striving for wealth, honor, and power, which requires adaptation to prevailing opinion and to what is useful at the moment.²²⁴ The same person of the dialogue discusses subsequently the three parts of traditional philosophy: physics is useless for him because the incessant change in nature permits no firm knowledge; ethics is superfluous since many and significant men have acted correctly without knowing the slightest about practical philosophy; and finally logic or dialectic (which provides metaphysics with its conceptualization) consists of empty words that cannot find application to sciences like medicine or mathematics.²²⁵ Remarkably, the defender of philosophy in his answer does not advocate the pure and uncompromising version of the primacy of the speculative life; he admits that human life necessarily has a practical and social character, but at the same time he asserts that philosophy can preserve action from immoralism and opportunism: for given the variety of laws and customs, no one can be good in the absolute sense by mere adaptation.²²⁶ Precisely for the sake of firm moral orientation, the investigation of the world and nature is required, which reveals the character and properties of God. Since we can know the essence of things²²⁷ proceeding from sense data and progressing constantly with the help of logic, we also come to the finding that moral truths and normative principles constitute the inner law of beings as these were created and are preserved by God.²²⁸ Theoretical knowledge stands indeed above action, but it also has a tangible practical dimension, and moral lessons can be drawn directly from it. *Sapientia*, which has heavenly things as its proper object, becomes *prudentia* by its transfer to earthly affairs.²²⁹

The fact that Sadoletto connects agnosticism and moral relativism with each other with the intention of combating both even more effectively constitutes, of course, only the reverse side of the traditional organic interweaving of metaphysics and ethics—an interweaving that shows and confirms itself at every critical turn in the history of metaphysics. With the same intensity, this questioning appears also in Brués, who has the characters of his "Dialogues" argue about the relativity of moral values. In Brués' work, however, an additional difficulty becomes visible

²²⁴ *Phaedrus seu de Laudibus Philosophiae Libri Duo = Opera*, III, 147 f.

²²⁵ *A. a. O.*, 149 ff., 157 ff., 168 ff.

²²⁶ *A. a. O.*, 193.

²²⁷ *A. a. O.*, 226–228.

²²⁸ *A. a. O.*, 224.

²²⁹ *A. a. O.*, 234.

with which the pious defenders of metaphysics had to grapple after the emergence of profane skepticism: against this latter, they had to advocate for the possibility of a rational knowledge of the first causes and principles of Being as well as for the mutual support of theology and philosophy, but at the same time ward off every anti-theological slip of reason and philosophy and reject the claim to omniscience as soon as it seemed to threaten faith. Therein lies the dilemma of the pious apologist of metaphysics in the "Dialogues," who initially opposes the agnosticism of his conversation partner in Aristotelian fashion with the possibility of the knowledge of things through the knowledge of their first principles and causes; but when the Agnostic mocks him because of this agreement with pagan philosophers and reminds him that at least the Peripatetics assume the eternity of the world and thus exclude divine creation, then he condemns the intellectual curiosity that drives us to want to investigate the divine will and measure it by our finite standards, and names arrogance the cause of all philosophical errors. He sees himself nevertheless forced to a retreat again as soon as the Agnostic replies that he would mean nothing else when he designates human knowledge in general and metaphysics in particular as self-complacent imagination.²³⁰

In Brués' writing, however, we also encounter the other dilemma of the defenders of metaphysics in the 16th century, of which we spoke above in connection with Castellani's views. It concerns here the endeavor to reconcile sensualistic starting point and intellectualistic results in Aristotelian philosophy. The obvious difficulties that resulted from the theory of the *tabula rasa* for metaphysics as purely intellectual grasping of true Being had already earlier produced attempts to moderate Aristotelian sensualism by Platonic thought material; thus the way was cleared for a certain mixing of Platonism and Aristotelianism, and in this respect it is by no means accidental that the greatest representatives of the metaphysics of the Renaissance, M. Ficino and Giovanni Pico, condemned the contemporary disputes between Platonists and Aristotelians. The defender of metaphysics in Brués' "Dialogues" accepts Aristotelian induction following sense data, but he wants to underpin the self-activity, independence, and metaphysical cognitive capacity of the soul by the Platonic theories of recollection and innate ideas, expressing his displeasure at the disputes between Platonists and Aristotelians. His skeptical conversation partner praises Aristotelian empiricism emphatically and provocatively, which prompts him to the following compromise construction: knowledge is indeed innate, but only in a latent state, and clarifies itself gradually in a process that starts with sense data and their processing; at the same time, it is recognized that the Platonic doctrine of the soul underpins immortality better by avoiding the traps that the Aristotelian-Averroistic theory of the return of the individual soul into the impersonal universal intellect posed to the Christian view.²³¹

²³⁰ *Dialogus*, 121–124.

²³¹ *A. a. O.*, 153 ff., 162 f.

4. The Separation of Logic and Metaphysics from one another and the Formation of the Modern Concept of Method

a. General Remark

The separation of logic from metaphysics already constituted an important aspect of nominalist critique of metaphysics in the 14th century; in the 16th century, however, it is pursued systematically and forms, in itself and in its consequences, a significant turning point in the history of metaphysics and the critique of it. In itself, it meant that metaphysics could not be reconciled with the ideal of rational demonstrative knowledge and that consequently both the more or less incomplete attempt at their coupling in Plato's "Sophist" and their large-scale Aristotelian interlacing (along with its scholastic version) represented futile undertakings. The opponents of metaphysics in the 16th century had, of course, primarily scholastic Aristotelianism in mind and knew exactly what role the close connection of logic and metaphysics, indeed the formation of the former with regard to the needs of the latter, played in its systematic construction. In fact, at the center of Aristotelian logic stands the construction of concepts on the basis of the distinction and comparison of sensible qualities, so that generalizing abstractions can result from this, the hierarchization of which is intended to provide the gradation of logical determinations (species, genus, etc.). The fact that the higher determinations are also the most abstract is not considered a disadvantage here, but rather as a confirmation of the metaphysical thesis that the general and abstract forms the real, ontologically given form of the connection of individual things with one another; precisely for this reason, the concept of Being stands at the peak of the logical as well as the ontological hierarchy, while a key function is assigned to the general or universal on both levels. Aristotelian abstraction thus raises the claim of grasping the general determining factors in the individual things. This is also the goal of the Aristotelian definition on the basis of the genus and the specific difference: to grasp the essence of the thing and at the same time to indicate the position it holds in the gradation of substances.²³² In the doctrine of definition, the Aristotelian interlocking of logic and metaphysics thus becomes clear, and therefore this doctrine drew the heavy fire of the opponents of metaphysics and Aristotelianism in the 16th century not by accident.

Of decisive significance for the intellectual history of the modern age was the fact that the separation of logic from metaphysics marked the beginning of a transformation of the traditional quantities of logic, at the end of which stands the modern concept of method. The

²³² On the relationships between logic and metaphysics in Aristotle see in general Prantl, *Geschichte*, I, 104 ff., as well as Cassirer, *Substanzbegriff*, 4 f., 8–10.

separation of logic from metaphysics drove this development forward in a twofold manner. By seeming to confirm the view that metaphysics as rational knowledge is impossible, it contributed to declaring the natural and human sensible world, in short This-World, as the exclusive space of unfolding for reason. And by loosening logic from its metaphysical ties, it offered it the opportunity to place itself in the service of that reason which (regardless of whether with regret or not) abandoned the ideal of omniscience in the old sense and made This-World the sole object of knowledge. It is obvious that logic could assert itself in its new position only if it transformed itself according to the needs of this turn to the world of experience. Precisely at this point, the neuralgic function of the humanist rehabilitation of rhetoric, known to us, makes itself felt. In its first phase, this rehabilitation meant a displacement of logic in favor of rhetoric; in the phase that interests us here, something else is important, namely the transformation of logic in the light of the postulates and methods of rhetoric. And since, as we know, the proximity of rhetoric to the human practical-social world was considered self-evident, it is now assumed that the transformation of logic with the help of rhetoric would turn logic into an organ of empirical orientation and research, thus into an *ars inveniendi*. Let us go into this aspect somewhat more closely.

The doctrine of the *Topoi* [Topics] forms, as is known, the characteristic procedure of Aristotelian rhetoric. The primacy of rhetoric, as the Humanists proclaimed it, therefore meant that the doctrine of the *Topoi* should eliminate Aristotelian logic and the doctrine of categories. This implied, in turn, the elimination of metaphysical questionings. For the categories referred to universals which were ascribed to a specific subject; through the attribution of predicates or the *modus praedicandi*, the bridge was built between thought and the forms of syllogism on the one side and things on the other.²³³ In contrast to this, the *Topoi*, i.e., the fundamental forms of argumentation that could serve for the treatment of all possible questions, were more plastic and illustrative; they dealt, that is, not with concepts like "difference" or "similarity," but with different or similar things. While the categories were intended to bring thought into contact with the ontological nature of things, the *Topoi* established a connection between the colorful material of information etc. available at any given time and the probabilistic forms of argumentation of rhetoric, which according to the Aristotelian view lacked the exactness of logical demonstrations, although they exhibited certain analogies to these latter. The Humanists are now not content with the elimination of logic and the rehabilitation of rhetoric, but they take a step further: they incorporate logic into rhetoric by letting the categories merge into the *Topoi* and more or less blurring the boundaries between scientific demonstration and probabilistic argument (in the Aristotelian sense of these terms). Here the inner relationship between

²³³ On the manner in which Thomas connects logic and metaphysics *ex modo praedicandi*, see Doig, *Aquinas*, 247 ff.; cf. 306 ff.

agnosticism and the elimination of logic in favor of the doctrine of the *Topoi* also becomes visible: if one considers the first causes and principles on which every rigorous demonstrative science must rest to be unrecognizable, then no other reference point and framework of orientation remains than the merely probable. Agnosticism commands intellectual frugality, and the doctrine of the *Topoi* is the fare of the frugal—who nevertheless feel self-sufficient and even happy, since they have gotten rid of the whole old complex of logic and metaphysics at once.

In methodological terms, the primacy of rhetoric means that the finding (*inventio*) of the *Topoi*, their connections with one another, and their relationships to one another step into the place of the judgment and the syllogism. The *Topoi* are established through the determination, registration, and classification of the similarities between things. The *inventio* of the *Topoi* is therefore (in contrast to the deductive character of the syllogism) inductive and related to an encyclopedic systematics; the spread of the encyclopedic ideal in the 16th century and the formation of the new method, the expansion of empirical knowledge and the change in the manner of its systematic evaluation go hand in hand. However, the *inventio* of the *Topoi* is not simply opposed to the technique of the syllogism, but rather it is introduced into the same in order to transform the syllogism, so to speak, from within on the basis of the inductive procedure, even if its external form remains unchanged. The *inventio*, in other words, grants the syllogism its starting point and its material prerequisites by collecting, evaluating, and classifying empirical material that is intended to serve as the basis and tangible confirmation of the first proposition of the syllogism, on whose soundness the correctness of the whole syllogism largely depends. The *Topos* that results from the *inventio* thus becomes the major premise of the syllogism, i.e., the major premise is not postulated, but formed as a *Topos*. The opponents of Aristotelian logic did not doubt the formal accuracy of the syllogism, but they questioned the validity of the major premise, which expressed general and necessary truths in abstract form or with the help of universals. If the deductive-synthetic syllogism form is formally logically more exact, it leaves on the other hand the real soundness of the major premise often in suspense; the inductive-analytic syllogism form offers, on the contrary, less formal-logical closure, but seems to vouch better for the content of the generalization reached in each case. If one therefore wants to use the synthetic syllogism form without the associated risks, one should formulate its major premise on the basis of the analytic procedure. This reorientation implies, of course, a drastic change of the concept of induction. It is sometimes overlooked that Aristotelian induction differs radically from the modern one. While the former is a procedure that is intended to lead to the grasping of substance through successive abstractions on an ever-higher level, induction for the representatives of modern analytic method means the path from the particular to the general or the establishment of generalizations without regard to substantial-qualitative criteria; if the question of substance is

no longer posed, then the inductively reached generalization, which is to be understood rather as a quantitative expansion, has very little to do with Aristotelian abstraction. The elimination of substance makes the logically highly problematic leap from sensualism to intellectualism superfluous, and therefore one can proceed in induction similarly to the construction of rhetorical *Topoi*: induction thus becomes *inventio* and *ars inveniendi*.

These were, of course, important steps toward the modern concept of method, although, as we shall see immediately, they were not yet sufficient. In any case, the term "method" was initially not used in connection with *inventio*, but was rather a synonym for *ordo*—for that *ordo*, namely, in which the teaching material should be presented to achieve the best possible pedagogical effect; "method" thus meant, just as in antiquity, *ars*, and constituted a means of the reformist efforts of the Humanists in the field of education.²³⁴ In the course of the 16th century and to the extent that the elaboration of the doctrine of the *Topoi* progresses, however, an increasing connection of "method" occurs not with mere *ars*, but with *ars inveniendi*.²³⁵ Term and matter proceed henceforth together, but in their common march they burst the intellectual framework of the humanist movement and its later further developments, and thus they reach the end we know today: meant is the primary reference of the concept of method to modern mathematical natural science. Method and mathematical natural science meet and combine on the basis of a fundamental worldview option that turned directly against the traditional hierarchy of ontological levels: it concerns here the conviction that the natural-sensible world can be known rationally, completely, and methodically precisely because it is structured rationally-lawfully from home. To represent such a conviction consciously and to undertake the connection of method and mathematical natural science, the intellectual horizon of the Humanists had to be overcome while simultaneously evaluating their preliminary work. The Humanists concentrated their interest on the world of rhetoric in the broadest sense, i.e., on the political-social and cultural activity of humans. Their indifference toward natural science did not, of course, detract from the significance of the worldview reorientation they had effected through a series of theses (primacy of the *vita activa*, principle of *verum factum convertuntur*); this same indifference prevented, however, a veritable revolution of the traditional metaphysical view, according to which the sensible world in general could not provide an object of scientific treatment. Precisely because this view remained more or less unchallenged, the Humanists had to admit that, by taking rhetoric also as a methodological model, they remain with merely

²³⁴ On the Greek precedents of method (from the Platonic connection of method and rhetorical art to Galen and the commentators of Aristotle) and on the humanist use of the term in the sense of the didactic *ordo*, see Gilbert, *Renaissance Concepts*, the first two chapters (3–66). The third chapter (67–115) examines the reform efforts of the Humanists in the various areas of education and didactics.

²³⁵ On the use of the term "method" in connection with the doctrine of the *Topoi* in Melanchthon's writings, see Vasoli, *Dialettica*, 298 ff., 325 ff.

probable knowledge and must abandon the Aristotelian strict demonstration as well as any recourse to the intelligible world of causes and substances—although, as said, they felt this abandonment more as a liberation than as a loss. By preferring the concrete probability of the *Topoi* to the abstract certainty of logic, the Humanists confess theoretically to the traditional scale of values—only they place themselves consciously on its lower rung; the worldview option is indeed new, but it is articulated through the old conceptualization and moreover remains standing halfway, since the natural world is neglected; thus the supernatural [world] could only be questioned indirectly and only by way of agnosticism or the primacy of the active life.

These ambivalences or contradictions were put to an end by the coupling of mathematical natural science and method, which rested on the worldview conviction that nature is structured rationally. Absolute scientific certainty thus became the ideal again—but this time science and its certainty referred not to the sphere of transcendent spirit, but to the sensible world. The method of the new *ars inveniendi* could essentially not be content with *Topoi* and merely probable arguments; and since the new *ars inveniendi* was intended to be not a probability theory but a genuine science, logic for its part had to displace rhetoric. This logic contains, indeed, still several orthodox Aristotelian elements, and in its opposition to humanist rhetoric it seems even "more Aristotelian," but in reality it concerns here a logic with a fundamentally new orientation, and this not only because of its detachment from metaphysical questioning, but also because of the elimination of syllogistics²³⁶ in favor of the investigation of new possibilities in the field of induction and deduction; even the more traditional elements of Aristotelian logic receive a new sense and a new function in this new framework.²³⁷ Here the significance of the preliminary work of the Humanists shows itself, even if this preliminary work was received not consciously and directly, but rather spontaneously and as a self-evident component of the intellectual atmosphere: we mean the separation of logic from metaphysics and the working out of empirical induction on the basis of the doctrine of the *Topoi*. Of course, these theoretical achievements of Humanism had to be transferred back from the field of rhetoric to the field of

²³⁶ One reason for this lay in the difficulty the Aristotelians had in incorporating mathematics—which was making rapid advances in the 16th century—into syllogistic as a universally valid method of demonstration; quite early, moreover, people pointed out the absence of the syllogistic method in Euclid. The conservative Aristotelians, for their part, concluded from the disharmony between mathematics and syllogistic that mathematics could not grant scientific certainty according to Aristotelian criteria; see Gilbert, *Renaissance Concepts*, 86 ff.

²³⁷ Already theological metaphysics knew the use of the synthetic and the analytic method. On the ontological and logical employment of *compositio* and *resolutio* in the Middle Ages see Oeing-Hanhoff, *Methoden der Metaphysik*, 71 ff.

logic, and furthermore one had to confess anew to the ideal of scientific certainty, albeit this time on the basis of the conviction of the intrinsic rational structuring of nature. Although Humanism was unable to take these decisive steps, it cleared the way for a new logic of research, which in many respects represented a cleansed and transformed Aristotelianism. Put differently: Aristotelianism (without metaphysics) becomes usable at the moment when Humanism is overcome, which, however, for its part had contributed significantly to the overcoming of (logically-metaphysically oriented) Aristotelianism earlier.

Such is the paradoxical and contradictory nature of the process of emergence of the modern scientific method. In our differentiated perspective, therefore, its previous interpretations must appear as one-sided or false—i.e., both those that want to know nothing of the positive contribution of Humanism, pointing to the aversion of Humanists to mathematics and physics and, conversely, highlighting the fruitful transformation of Aristotelian logic in the service of natural-scientific purposes, and those that reduce the whole problem to the humanist revival or processing of the concept of method, overlooking the essential prerequisites and consequences of the coupling of method and investigation of nature.²³⁸ Such and similar one-sidednesses in interpretation are called forth by the confusing paradoxes of the multidimensional process described above—paradoxes like e.g. the fact that the fiercest opponents of Aristotelian logic came from humanist circles and stood as strangers to the natural sciences, while those who had lively natural-scientific interests (e.g., the philosophizing physicians of Padua) judged Aristotelian logic much more positively. Apart from these paradoxes, the one-sidednesses of previous interpretations are attributable above all to the misjudgment of the fact that the formation of the modern concept of method presupposed fundamental worldview decisions that turned the traditional hierarchy of ontological levels upside down. Only against the

²³⁸ The former error is committed above all by Randall (*Development of scientific Method*, 177 ff.), who views the problem in a narrow scientific perspective, overlooking the worldview presuppositions of the application of the new method and also failing to recognize the significance of the Humanists' preparatory work for the liberation of Aristotelian logic from the fetters of traditional metaphysics (cf. below Sect. 4 e of this chapter). The latter error is committed by Gilbert (*Renaissance Concepts*), who investigates the question of method among the Humanists only from the perspective of the *ordo*, but not from that of the *inventio*, which is decisive for the later natural-scientific methodology; he falls into this error not least because of his narrowly philological procedure, i.e., as a result of the exclusive concentration of his investigation on texts in which the term "methodus" appears. If the matter were as presented in his work, Randall's thesis would be correct, i.e., we would have to deny any contribution of the Humanists to the emergence of the modern concept of method. Finally, in works such as Vasoli's (*Dialettica*), the humanist contribution to the elaboration of the empirical-inductive method through the renewal of the doctrine of the *Topoi* is aptly described, but the decisive questions raised by the transfer of induction from the realm of rhetoric to that of natural science are not investigated.

background of this finding can the nature, function, and interlacings of the intellectual currents of the transition period of which we speak here be assessed.

b. Agricola and Vives: Their Critique of Aristotelian Logic

The physiognomy of Agricola's work is conditioned by the general questionings of Italian Humanism.²³⁹ The connection of the turn to rhetoric with the turn to the concrete human being acting within society appears here in the form of the detailed investigation of those passions and moods that the orator wants to influence.²⁴⁰ Equally characteristic of the detachment from purely theoretical and logical consideration is Agricola's assumption that the *artes* arose from the gradual generalization of repeated empirical observations.²⁴¹ To these *artes* belongs also dialectic, which Agricola distinguishes with special emphasis from metaphysics; while metaphysics deals with the first causes and principles of things as well as with the ontologically relevant concepts of logic (definition, genus, etc.), the task of dialectic consists, as indeed results from its etymology, in the finding of arguments and in the consideration of things from this standpoint.²⁴² Dialectic is, in other words, bound to human speech and language, which for their part automatically imply dialogue and the dialogic situation. The components of dialogue are three: the (respective) speaker, the (respective) listener, and the content of the (respective) speech; the first has to do with grammar (the speaker applies grammatical rules to make himself understood), the second with rhetoric (as the art of persuading the listener), and the third with dialectic proper as the art of presenting probable arguments about any given question. Agricola explains, however, against Aristotle that probable is not merely what is considered so by all, by most, or even by the experts, but what is appropriate to the object under debate.²⁴³ Dialectic thus appears as something more than mere, perhaps deceptive art of persuasion; it becomes a method of grasping the matter itself approximately, but objectively. If division and definition, writes Agricola, belong to the area of competence of metaphysics, there remains the distinction between truth and falsehood, both in things and in sentences—common task of all arts²⁴⁴—which implies, of course, that truth-finding by no means identifies itself with division and definition. Thanks to this expansion of its competencies, the special method of rhetoric, i.e., the establishment of *Topoi*, becomes a method with a more general claim, which feels superior to the methods of traditional logic. The establishment of *Topoi* thus comes to the foreground,

²³⁹ On the intellectual stimuli Agricola received during his long years of study in Italy, see Vasoli, *Dialettica*, 149 ff. Prantl points out Agricola's commonalities with Valla (*Geschichte*, IV, 167 ff.).

²⁴⁰ *De inventione dialectica*, II, 1–2 = pp. 378 ff.

²⁴¹ *Op. cit.*, II, 7 = p. 209.

²⁴² *Op. cit.*, 209 f.

²⁴³ *Op. cit.*, II, 2 = p. 192.

²⁴⁴ *Op. cit.*, II, 7 = p. 210.

whereby the strict Aristotelian distinction between probabilistic argument and scientific demonstration falls away.

Agricola doubts the possibility of definition based on genus and specific difference, especially since the latter is difficult to find, which is why accidental perceived properties are generally taken for specific differences.²⁴⁵ Instead of striving for a definition that is theoretically plausible but practically unrealizable, we should attempt an *explicatio* from the start, thus a detailed description of a thing, as we frequently find it in orators or poets.²⁴⁶ The *explicatio* is structured not hierarchically, but rather horizontally; it is a perhaps loose, yet vivid sum of characteristics and properties that have been collected and somewhat ordered one after another. Based on the same empirical-inductive procedure, the *Topoi* are also established, namely by determining and classifying similar aspects of different things. The *Topos* is compared to a container or safe in which everything that can be said about a certain matter, all available arguments and data about it, are deposited in such a way that they can be found and taken out or used at any time.²⁴⁷ To these belong similarities, differences, temporal and spatial determinations, etc.; some of the *Topoi* mentioned by Agricola (overall they are more numerous than the Aristotelian ones) coincide with the Aristotelian categories²⁴⁸—a sign of the progressing transformation of logical quantities according to the demands of dialectical-rhetorical methodology.

The goal of dialectic is thus the finding (*invenire*) of those arguments or *Topoi* that can effect persuasion, their expedient disposition (*disponere*), and arrangement (*ordinare*), so that they can be taught more easily and enticingly.²⁴⁹ To persuade means indeed to combine things or concepts with one another in such a way that this is somehow plausible and convincing. Two different terms can, however, only be combined with one another with the help of a third, which is called the argument and whose finding constitutes the first part of dialectic (*via excogitandi argumenti* or *via inventionis*), while in the second part of the same (*pars iudicandi*) it is judged whether the argument is formally correct or not.²⁵⁰ Agricola blames the Aristotelian dialecticians because they often place the formal assessment of arguments first without any regard for the content; he wants for his part to turn the old ranking of *iudicium* and *inventio* upside down by concentrating his interest on the latter, i.e., on the empirical and pragmatic

²⁴⁵ *Op. cit.*, I, 5 and 7 = pp. 26, 43.

²⁴⁶ *Op. cit.*, I, 5 = p. 27.

²⁴⁷ *Op. cit.*, I, 2 = p. 9.

²⁴⁸ *Op. cit.*, I, 4 = pp. 22 ff. (complete enumeration of the *Topoi*).

²⁴⁹ *Op. cit.*, II, 3 = p. 197.

²⁵⁰ *Op. cit.*, I, 2 = p. 8.

grounding of the argument on the basis of the doctrine of the *Topoi*.²⁵¹ Before we proceed to the formal assessment of the argument, we should examine the real soundness of the syllogism by placing a *Topos* considered equivalent in the place of the major premise.²⁵²

Agricola's example shows clearly in what way the primacy of rhetoric and the elaboration of the doctrine of the *Topoi* accompanying it have effected not merely the elimination, but rather—what appears even more important for future development—the transformation of traditional logic. This process hides behind various synonymies and renamings that make the transition of logic into dialectic imperceptible. Thus the Humanists exploit the medieval synonymy of these two terms with the intention of abolishing the Aristotelian substantive distinction between them and subsuming logic under dialectic as the science of human speech, since, as they opine, logic too stems, corresponding to its etymology, from *Logos* (in the sense of *sermo* and not of *ratio*) and refers to it. This determination of the relationships between logic and dialectic we encountered already in Valla, but in Agricola its ultimate consequences appear, specifically through the exposition of the doctrine of the *Topoi*. Also for Vives, who traces the central importance of rhetoric back to the fact that society rests on law and the spoken word,²⁵³ dialectic and logic are essentially identical as sciences of *sermo*.²⁵⁴ Since all areas of the knowable must be articulated linguistically, dialectic constitutes the introduction to them and at the same time a guide in their study;²⁵⁵ it should therefore be learned not as an end in itself, but as an instrument and means.²⁵⁶ Dialectic is, in other words, *instrumentum inveniendi*; it serves namely for the finding of the correct argumentation.²⁵⁷ Of course, it can offer only probabilities and no *demonstratio* in the Aristotelian sense, which refers, however, to the objects of knowledge of metaphysics and fails itself because of their ungraspability.²⁵⁸ Dialectic has nothing to do with scholastic mind games, with the *praedicabilia* and *praedicamenta*, which produce incredible monsters.²⁵⁹ Vives blames the language of scholastic metaphysics from the perspective of the learned Humanist, i.e., he criticizes its distance from classical Latin; hence come the linguistic inducements of many sophisms, which among other things also obscure the sense of divine

²⁵¹ *Op. cit.*, II, 1 = pp. 178 f. The distinction between *judicium* and *inventio*, which was already familiar to Cicero and Boethius, is highlighted in the 15th and 16th centuries precisely with the intention of placing *inventio* first, cf. Crescini, *Metodo*, 61.

²⁵² *Op. cit.*, II, 19 = p. 280.

²⁵³ *De causis corruptarum artium*, IV, 1 = *Opera*, VI, 152 ff.

²⁵⁴ *In pseudo-dialecticos* = *Opera*, III, 40.

²⁵⁵ *Op. cit.*, 39 f.

²⁵⁶ *Op. cit.*, 58.

²⁵⁷ *De causis...*, III, 1 = *Opera*, VI, 111 f.

²⁵⁸ *Op. cit.*, III, 3 = *Opera*, VI, 118.

²⁵⁹ *Op. cit.*, III, 5 = *Opera*, VI, 132.

doctrines and therefore call forth heresies and all kinds of evils.²⁶⁰ The main responsibility for this bears, to be sure, Aristotelian metaphysics itself, which indeed testifies to the education and genius of its author, yet teems with unclarities and empty subtleties, by wanting to simulate knowledge of things that are unknowable.²⁶¹

Vives is clear about the close relationship between Aristotelian metaphysics, logic, and doctrine of categories. He accuses the books of the Aristotelian *Organon* dealing with categories and interpretation not only of confusion and sterility, but also of entering into foreign objects of knowledge, by which the metaphysical implications are meant.²⁶² The interlacing of logic and metaphysics shows itself, e.g., in the Aristotelian doctrine of demonstration, thus the proof based on ultimate and necessary, metaphysical principles. These are, however, according to Vives, unknowable for the finite human intellect, so that there can be no final proof, but only an always open and incomplete proof procedure, a ceaseless search for certainty. And how are we supposed to form the universals required for *demonstratio* if the collection of individuals that must be made the basis of the formation of universals can never be brought to an end?²⁶³ The origin of knowledge from the senses and its consequent finite character places, moreover, insurmountable obstacles in the way of grasping substance, so that we are reliant here on mere comparisons and analogies.²⁶⁴ In view of the unknowability of substance, however, the Aristotelian doctrine of categories also cannot be correct; for if we do not know what is essential for the substance, then we possess no fixed criteria to attribute to it the attributes truly belonging to it, but rather we attribute to it others respectively, and indeed often accidental ones.²⁶⁵ The situation is no different with definition, in which the determination of the specific difference likewise occurs accidentally or according to conventional viewpoints.²⁶⁶

Since Aristotelian definition, however flawless it may look on paper, is practically useless, we must find another access to the reality of things, even if we can thereby procure only probable knowledge. Vives translates the primacy of rhetoric into methodology and epistemology by replacing definition with the description of the individual or the group belonging to this or that genus; this description is an explanatory representation of the respective object through the

²⁶⁰ *In pseudo-dialecticos* = *Opera*, III, 50, 54 f.

²⁶¹ *De tradendis disciplinis*, IV, 2 = *Opera*, VI, 352.

²⁶² *De causis...*, III, 1 = *Opera*, VI, 113 f.

²⁶³ *Op. cit.*, III, 3 = *Opera*, VI, 118 f. Despite this, Vives assumes the existence of universals, even though they are supposed to be ungraspable (e.g. *De explanatione essentiarum* = *Opera*, III, 124). Agricola thinks similarly, *De inventione dialectica*, I, 6 = pp. 37 ff.

²⁶⁴ *De explanatione essentiarum* = *Opera*, III, 122.

²⁶⁵ *De causis...*, III, 2 = *Opera*, VI, 114 f.

²⁶⁶ *De explanatione essentiarum* = *Opera*, III, 126.

stringing together of its various components (*explanationes per adjuncta*; synonymous with *explanationes*, the terms *declarationes*, *expositiones*, *explicationes*, *descriptiones* are used). In contrast to definition, which wanted to express the innermost essence of a thing in all brevity, the mentioned description raises no claim to brevity or exclusivity, since it proceeds cumulatively and in the knowledge that a thing can be represented in different ways, even if one could define it in a single way.²⁶⁷ The doctrine of the *Topoi* thus offers itself as an alternative to definition; while Vives criticizes the *Organon* mostly, he finds the *Topics* fruitful, although he considers the Aristotelian classifications in detail to be vague.²⁶⁸ He understands the *Topos* as an instrument for finding probabilistic arguments and compares it to the drawers of pharmacists, which one opens when one needs something specific.²⁶⁹

We need not go into the similar processings of the doctrine of the *Topoi* here, as they were undertaken by other Humanists within the framework of the rediscovery of rhetoric.²⁷⁰ What must be held fast is the simultaneous rejection of Aristotelian logic and metaphysics, which went hand in hand with a transformation of the former in the light of the doctrine of the *Topoi* and quite independently of any metaphysical assumption. This in turn cleared the way for the conception of a method that would have the character of a generally usable instrument regardless of the qualitative nature of its field of application. The ultimate consequences of this separation of (transformed) logic and metaphysics from one another will encounter us in Zabarella.

c. Ramus' Critique of the Aristotelian Coupling of Logic and Metaphysics

Ramus' ideas, which exerted a noteworthy influence on almost all of Europe,²⁷¹ take shape in the intellectual climate created by the rehabilitation of rhetoric on the part of (Italian) Humanism,²⁷² although Ramus in a later phase of his development tended toward a logical-dialectical (i.e., no longer primarily rhetorical) conception of the problem of method and even received renewed

²⁶⁷ *Op. cit.*, 132.

²⁶⁸ *De causis...*, III, 3 = *Opera*, VI, 120 ff.

²⁶⁹ *De instrumento probabilitatis* = *Opera*, III, 86. Subsequently, the *Topoi* are discussed in detail.

²⁷⁰ Melanchthon is particularly interesting in this regard; see on him Breen, *Subordination*, esp. 16 ff., 22 f., and Vasoli, *Dialettica*, 284 ff.

²⁷¹ On its dissemination see Vasoli, *Dialettica*, 530 ff.; Ong, *Ramus*, 295 ff.; Howell, *Logic and Rhetoric*, 173 ff.

²⁷² Ramus welcomes in Cicero above all the reconciliation of philosophy and rhetoric; his student Talon also sees in Ciceronian skepticism a guarantee against dogmatism and a defense of *libertas philosophandi*, see Schmitt, *Cicero Scepticus*, 78 ff. As with the Italian humanists, the terminist-nominalist influence on Ramus remains secondary compared to the aftereffects of the rehabilitation of rhetoric; moreover, Ramus uses the same sharp language about the Terminists as the Humanists do, see e.g. *Aristotelicae Animadversiones*, 6 v (cf. above Sect. 2 a).

Aristotelianism.²⁷³ Since we are interested here not in Ramus' methodology, but in his critique of metaphysics, we will deal with the earlier phase of his development, which stands closest to the questioning that was discussed in connection with Agricola and Vives. Ramus too starts from the assumption of a close connection between rhetoric and dialectic (logic).²⁷⁴ Dialectic is the art of defending a position through speech (*virtus disserendi*),²⁷⁵ and must not distance itself from everyday language.²⁷⁶ The source and guide of dialectic is nature; the dialectical art should imitate natural dialectic, which even uneducated people practice successfully.²⁷⁷ Following Agricola, Ramus emphasizes the division of dialectic into *inventio* and *iudicium*, and regards the same as indispensable for ending the chaotic state that in his opinion prevails in Aristotelian logic.²⁷⁸ Thus, the Aristotelian view on the relationship between Topics and Analytics is reversed, since the placing of *inventio* before *iudicium* amounts to a priority of the doctrine of *Topoi* over the doctrine of judgment and syllogism, while Ramus at the same time applies the doctrine of *Topoi* not exclusively in the realm of probabilistic arguments, but considers it competent and sufficient with regard to all forms of argumentation.²⁷⁹ He designates the content of the *Topics* as confused and useless and accuses Aristotle of ignorance of *inventio*;²⁸⁰ this hinders him just as little as Agricola, however, from using most Aristotelian *Topoi* as material and orientation framework—just like the Aristotelian categories, which are transformed into *Topoi* by being loaded with empirical content and presented as products of *dialectica naturalis*.²⁸¹ From this side, it could appear as if Ramus' innovations were not revolutionary, but rather meant a reorganization and simplification of the Aristotelian instruments.²⁸² And yet the changes brought about touch upon essential matters. As a collection and compilation of empirical data, *inventio* eliminates the Aristotelian ideal of science as knowledge *ex causis* and substitutes a descriptive and quantitative conception of knowledge. Certainly, opines Ramus, knowledge *ex causis* is more complete, but man cannot know the ultimate causes and therefore

²⁷³ The works of Sturm, Melanchthon, and Ramus mark the transition from the rhetorical to the dialectical-logical treatment of the problem of method, see Ong, *Ramus*, 233 f., 307. On the formation of Ramus' methodology, the (partial) modification of his original views, and the influence of Neo-Aristotelianism on his late work, see Vasoli, *Dialettica*, 429 ff., 453 ff., 547 ff.; cf. below note 363.

²⁷⁴ *Aristotelicae Animadversiones*, 78 v.

²⁷⁵ *Dialecticae Institutiones*, 5 r.

²⁷⁶ *Arist. Animadv.*, 61 r.

²⁷⁷ *Op. cit.*, 3 v, as well as *Dial. Inst.*, 6 v–8 r.

²⁷⁸ *Dial. Inst.*, 8 v, as well as *Arist. Animadv.*, 7 r–8 v.

²⁷⁹ Cf. Risse, *Logik der Neuzeit*, I, 127 f.

²⁸⁰ *Arist. Animadv.*, 21 r ff., 25 v.

²⁸¹ *Dial. Inst.*, 9 r ff.

²⁸² Cf. Howell, *Logic and Rhetoric*, 342.

he must restrict himself to collecting the common or principal properties of things; the definition of a thing thus comes very close to its description.²⁸³

The *iudicium*, i.e., the judgment on the soundness of an argument, is passed after the argument has been established thanks to the work of *inventio*. The *iudicium* constitutes a juxtaposition or comparison (*collocatio*) of the products of *inventio* with the question to be investigated, so that a statement about it becomes possible.²⁸⁴ It completes itself in three successive stages, the first of which is the syllogism, specifically as *collocatio* of an argument that resulted from *inventio* with the question to be solved.²⁸⁵ The incorporation of the entire procedure of *inventio* into the syllogism is intended to make good the most important disadvantage of the Aristotelian syllogism, namely the quasi-axiomatic, non-empirical character of the major premise, which makes a tautology out of the whole syllogism.²⁸⁶ If the *argumentum*, as it resulted from *inventio*, is incorporated into the syllogism, then its classical Aristotelian form dissolves and becomes a series of operations in which certain quantities or elements are added or subtracted.²⁸⁷ The transformation of thinking into an adding and subtracting operation signifies the enforcement of quantitative consideration against qualitative, i.e., the elimination of the vertical ontological hierarchy of qualities in favor of a horizontal compilation and grouping of empirical data.²⁸⁸ Ramus helps quantitative consideration to break through when he replaces the (qualitative) relationship of species and genus with the (quantitative) relationship of whole and part, whereby the species is identified with the single individual, while the genus ceases to be an independent entity and transforms into a sum of individuals.²⁸⁹ But also the two higher stages of *iudicium*, which are more complicated than the syllogism, are conceived not as hierarchization, but rather as increasingly intricate adding-subtracting combination of quantities that remain ultimately individual and empirical. Thus the second stage of *iudicium* consists of an

²⁸³ *Dial. Inst.*, 18 r v (*idemque est rei expositio, declaratio, demonstratio, interpretatio, enarratio atque definitio*).

²⁸⁴ *Op. cit.*, 19 v.

²⁸⁵ *Op. cit.*, 20 r.

²⁸⁶ *Arist. Animadv.*, 42 r.

²⁸⁷ *Dial. Inst.*, 20 v r.

²⁸⁸ In the next section we will become acquainted with the even sharper contours that the quantitative view takes in Nizolio's thought. To visualize the significance of this turn in its full extent, we recall that the mathematically and scientifically oriented thinkers of the 17th century often describe rational thought as an additive-subtractive operation (see e.g. Hobbes, *Leviathan*, V, as well as *De Corpore*, I, 1 § 2 = *Opera*, I, 2).

²⁸⁹ *Dial. Inst.*, 14 r. The replacement of the relationship between genus and species by the relationship between whole and part entails here, as with Nizolio, the replacement of *divisio* (namely the division of the genus into its species) by *partitio* (namely the division of the whole into its parts), see *op. cit.*, 28 v.

arrangement of several different arguments, each of which results from a special *inventio*,²⁹⁰ while the third claims to be an *ars omnium artium* [art of all arts], which is intended to encompass the whole empirically given manifoldness of the world and at the same time reduce the same to ultimate epistemological principles.²⁹¹

Ramus' ambition to make dialectic a general methodology and epistemology hangs directly together with his intention to separate logic and metaphysics from one another. As general methodology, dialectic is applied to all *artes* and is intended to regulate their relationships to one another within an overarching cognitive whole; metaphysics it is not, if only because it does not form the epistemological background of physics alone.²⁹² When Ramus speaks of dialectic in this sense, he uses the term "logic" synonymously; at the same time, however, he knows that the Aristotelian coupling of logic and metaphysics went hand in hand with the clear conceptual distinction between logic and dialectic, and therefore he undertakes the dissolution of that coupling through the abolition of this distinction. In his eyes, the fatal mixing of logic and metaphysics results from the false division of Aristotelian philosophy: the separation between demonstrative science and dialectical art in the *Organon* leads to the identification of the former with philosophy, specifically metaphysics, which is designated as *gnoristike sophia* [cognitive wisdom], while dialectic is merely *peirastike* [tentative/testing]. Nevertheless, Ramus continues, the epistemological function and validity of logic is undermined if it is separated from the beginning without reason into two parts, which are essentially identical, since dialectic and demonstrative science revolve equally around *inventio* and *iudicium*. The fact that dialectic poses questions, is thus aporetic, while demonstrative science formulates conclusions, does not signify an essential difference between the two, but only indicates two connected aspects of the same logical-dialectical operation. Therefore, the juxtaposition of dialectic and demonstrative science, specifically for the purpose of grounding metaphysics through the latter, cannot be justified at all. General science theory is one single thing, regardless of whether it is called logic or dialectic, and notwithstanding that its various branches perhaps do not guarantee the same certainty of knowledge.²⁹³

²⁹⁰ *Op. cit.*, 27 r. To avoid scholastic subtleties and complicated syllogistics in the elaboration of this second stage of *iudicium*, Ramus refers to the way orators and poets develop a complex argumentation (*op. cit.*, 30 r).

²⁹¹ *Op. cit.*, esp. 35 v. Ramus clothes this plan of an *ars omnium artium* in the language of Plato's theory of ideas. His Platonism remains quite superficial, however, as we shall see.

²⁹² *Arist. Animadv.*, 64 r.

²⁹³ *Scholarum dialecticarum*, IX, 8 = p. 399; *Scholarum metaphysicarum*, IV = pp. 65, 67, 69.

By separating logic and metaphysics from one another, Ramus also discards a fundamental thesis of traditional metaphysics, namely that the status of knowledge depends on the status of its object and that therefore the science of eternal, immutable, and divine Being is superior to all others. In reality, opines Ramus, Aristotle makes metaphysics the most general and highest knowledge only *verbi ambiguitate* [by ambiguity of the word], i.e., by mixing it surreptitiously with logic, which is immediately useful for special disciplines, so that he can present metaphysics as equally necessary. But if we replace the amalgam of logic and metaphysics with dialectic as general methodology, then metaphysics must also shrink and coincide with theology, such that it will form not the most general, but the most special science and take the last place in the order of learning and teaching, since it does not possess the exactness and independence of logic and therefore can hardly be of use to the remaining disciplines.²⁹⁴ In any case, Aristotle errs when he calls his metaphysics (also) theology, while he treats theological questions only marginally and concentrates instead on those problems that are also discussed in the *Organon*.²⁹⁵ This unreflected mixing of logic and metaphysics, which severely impairs the former in its methodological task,²⁹⁶ shows itself in the doctrine of categories,²⁹⁷ by means of which the *archisophista* [arch-sophist] Aristotle wants to simulate that he knows about things that are inaccessible to the human intellect.²⁹⁸ The same mixing produces several contradictions and asymmetries within Aristotelian philosophy, as the famous list of aporias in the third book of the *Metaphysics* proves—aporias which, apart from the fact that they hang together neither with one another nor with the main theme of the work (i.e., the finding of the first causes), could be considered fictitious or easily soluble if one wanted to clarify them in the light of a logic that had separated itself from metaphysics and oriented itself by the doctrine of the *Topoi*.²⁹⁹ Confusions and tautologies are also produced by the double exposition of the (logical) doctrine of causes in Aristotle's *Physics* and *Metaphysics*.³⁰⁰

In its detachment from general methodology and its identification with theology, whose object *eo ipso* exceeds human cognitive faculty, metaphysics can raise no claim to the title of Queen of the Sciences, since it has nothing to teach them about the neuralgic problem of method, i.e., about the finding and selection of arguments; what it allegedly offers in this area, it owes only to its illicit mixing with logic.³⁰¹ But metaphysics appears just as empty when it undertakes to restrict itself to the investigation of the being as being and to leave aside the diversity of the

²⁹⁴ *Schol. metaph.*, I and VI = pp. 16, 18, 102 f.

²⁹⁵ *Op. cit.*, I = S. 11, 13.

²⁹⁶ Cf. *op. cit.*, II = . 44.

²⁹⁷ *Op. cit.*, V = S. 84 f.

²⁹⁸ *Arist. Animadv.*, 18 r.

²⁹⁹ *Schol. metaph.*, III = S. 55, 60 f., 50.

³⁰⁰ *Op. cit.*, I = S. 24.

³⁰¹ *Schol. dial.*, IX, 8 = S. 397 f.

sensible world; this claim amounts to the invitation to table companions at a sumptuous meal not to touch any dish, but to satiate themselves by merely smelling the Being scattered everywhere.³⁰² Incidentally, metaphysics itself necessarily breaks its promise to investigate the being as such when it makes essence the object of its researches, which constitutes only the first among ten categories. Philosophers who regard logic as general epistemology (*communis philosophia*) exclude, of course, the question of essence from their researches; the Peripatetics, however, who mix logic and metaphysics together, reckon essence sometimes to logical, sometimes to ontological quantities and accordingly confuse the levels of research.³⁰³ This same confusion makes itself felt in the fact that Aristotle sometimes separates the being from essence, quantity, quality, etc., considering it the *principium* of the rest, sometimes identifies being and essence with one another and regards quantity or quality, so to speak, as negations of the being; but how can mathematics, which deals with quantities, or physics, which deals with qualities, have Non-Being as object?³⁰⁴ Yet another contradiction in Aristotle results according to Ramus from these palinodes: on the one hand, Aristotle assures that definition refers to the *essentia singularis*, on the other hand, however, he asserts that definition has nothing to do with transient individuals.³⁰⁵

Here Ramus touches upon the Achilles' heel of Aristotelianism known to us, i.e., the abrupt transition from sensualistic premises to intellectualistic results. Ramus accuses Aristotle of striving through his metaphysics for a reversal of the natural course of knowledge as he had described it as an empiricist epistemologist; while knowledge proceeds in a natural way from perception and images to memory and thought, metaphysics strikes the reverse path.³⁰⁶ Although Ramus sometimes seems to waver on the question of universals,³⁰⁷ he nevertheless tends clearly to emphasize the purely (epistemo-)logical nature and function of general abstract concepts. Ideas in the Platonic sense of *ideae exempla* are pure fictions for him, and he even opines that Plato himself had rejected this kind of Ideas in "Parmenides," although he seems to assume them in other places. He admits, at any rate, the validity of the Aristotelian critique of the Platonic doctrine of Ideas,³⁰⁸ although he generally praises Plato and appeals to him, since he

³⁰² *Arist. Animadv.*, 64 r.

³⁰³ *Schol. metaph.*, IV = S. 65.

³⁰⁴ *Op. cit.*, XII = S. 140.

³⁰⁵ *Op. cit.*, VII = S. 115 f.

³⁰⁶ *Op. cit.*, I = S. 22.

³⁰⁷ *Ong, Ramus*, 209.

³⁰⁸ *Schol. met.*, XII = S. 164 f., 171. Such positive judgments about Aristotle do not appear frequently in Ramus' writings. It should be remembered, however, that he, in agreement with Bruni or Gianfrancesco Pico, e.g., represents the view that we have not received the genuine Aristotelian works, but merely commentaries or forgeries of them (*Arist. Animadv.*, 74 v–75 r). In this way, the foundation of scholastic

wants to shake the authority of Aristotle by an equal authority. Precisely for this reason, his appeal to Platonic theories is very free and often improvisational. His Platonic inspiration, if one may say so, refers incidentally not to the actual philosophical questioning, but to the educational ideal and pedagogical concern. At the same time, Ramus believes to find in Socratic maieutics a concept of dialectic that is related to his own, i.e., has to do primarily with the spoken word. He holds Platonic Ideas to be logical quantities, suitable for holding together and ordering a world that appeared fragmented and atomized after the collapse of the Aristotelian ontological hierarchy; the Platonic Idea is accordingly conceived just as quantitatively as the "genus."³⁰⁹

In his anti-metaphysical struggle, Ramus also uses some fideistic arguments that had already surfaced in the nominalist polemic against Arab-Aristotelian philosophy. Thus he writes that the cold, self-sufficient, and indifferent Aristotelian God has no points of contact with the Christian one, who cares for his creatures and stands close to them; Christianity and Aristotelianism could not be reconciled with one another.³¹⁰ Ramus colors his agnosticism fideistically sometimes, e.g., when he rejects the possibility of a metaphysics that would designate itself simultaneously as "theology" with the argument that the divine essence is no less ungraspable than the ultimate causes.³¹¹ Although the fideistic tones in his works are rather weak, the significance of his Calvinism and the Augustinian tradition in general for his questioning of intellectualistic metaphysics should not be overlooked. What must also be held fast, however, is the mixing of these motives with purely profane tendencies under the theoretical aegis of the primacy of practice over speculation³¹² and the associated extensive abolition of the boundaries between theoretical and practical knowledge.³¹³ Beyond that, some of Ramus' views indicate that his critique of Aristotelian logic and metaphysics entailed a veritable revolution of the ontological frame of reference, even if he did not possess the conceptual instruments to become aware of it. Thus Ramus criticizes Aristotle also because he denies physics the character of a complete and exact science, while he considers the logically-metaphysically grounded knowledge of causes to be certain; but if we wanted to apply this latter also to physics (which would be quite possible given the universal validity of logical

philosophy was questioned, while at the same time idealized antiquity was spared the accusation of having given birth to a bad philosopher.

³⁰⁹ On Ramus' relationship to Plato see Ong, *Ramus*, 40 ff., 205 f. Ramus himself writes that (Platonic) idea and genus (in his sense) are identical (*Schol. dial.*, III, 7 = S. 95 f.).

³¹⁰ *Schol. metaph.*, XII = S. 154 f.

³¹¹ *Op. cit.*, I = S. 16, 18, 20.

³¹² Like Agricola, Ramus also believes that the *artes* develop within the framework of social practice even before their rules are theoretically grasped (*Arist. Animadv.*, 4 r.).

³¹³ *Schol. metaph.*, VI = S. 101 f.; on Nizolio's corresponding views see the next section.

principles), then physics could just as well become a rigorous science.³¹⁴ What Ramus concludes here *e contrario*, Zabarella will articulate much more systematically a little later.

d. Nizolio and the Ultimate Anti-Metaphysical Consequences of the Humanist Turn toward Rhetoric

Nizolio's appearance in the intellectual horizon of the 16th century is significant for the strength and independence that profane thought had meanwhile attained. Without using fideistic evasions and alibis, Nizolio raises the uncompromising demand for a philosophy that would be free from any external pressure and any authority—regardless of provenance.³¹⁵ At the same time, Nizolio knows that he is continuing a certain tradition, which he wants to bring to a consistent end; thus he praises Valla's intellectual efforts against Scholasticism, but he considers them inadequate and declares that Valla had attacked the trunk and branches of metaphysics, but he himself wants to eradicate the tree by the root;³¹⁶ he also finds the work of Agricola and Vives positive, even if he condemns their tolerant restraint toward universals.³¹⁷ As a scion of the humanist movement, he opines that familiarity with classical languages and knowledge of grammar and rhetoric are indispensable prerequisites of true philosophy.³¹⁸ By rhetoric he understands, as he says, not merely speeches in court or the speeches of politicians (this would amount to a downgrading of rhetoric), but the entire social intercourse by means of language; seen in this way, genuine logic, as etymology also suggests, is identical not with its Aristotelian version, but essentially with rhetoric.³¹⁹ When Nizolio, who following the custom of his time uses the terms dialectic and logic synonymously, thinks of the Aristotelian form of logic, he separates dialectic and rhetoric strictly from one another, whereas he considers them identical when he understands dialectic (=logic) in his own sense. In its Aristotelian form, logic is either vague or defective. A useful science must have three things: an object (*materia*), a task (*officium*), and a goal (*finis*); thus the object of medicine is, e.g., disease, its task the treatment of the sick, and its goal healing. The object of Aristotelian logic is just as general as that of rhetoric, while its task and its goal remain in the dark.³²⁰ Understood in Nizolio's sense, however, logic = dialectic hardly differs from rhetoric—neither with regard to the just-mentioned three criteria nor

³¹⁴ *Op. cit.*, IV = S. 70.

³¹⁵ *De veris principiis*, I, 1 = I, 26 f.; cf. the analysis by Rossi, *Retorica e antimetafisica*, esp. 106–108.

³¹⁶ *Op. cit.*, I, 2 = I, 35.

³¹⁷ *Op. cit.*, I, 8 =, 94 f. Cf. above note 254.

³¹⁸ *Op. cit.*, I, 1 = I, 22 ff.

³¹⁹ *Op. cit.*, III, 8 = II, 92. On p. 96 Nizolio reproaches Agricola because the latter considers *inventio* the task of the dialectician and not the rhetorician; apparently it escaped him that Agricola gives dialectic a new meaning, just as he himself conceives logic (synonymous with dialectic) anew. On the primary relation of logic to *sermo* and not to *ratio* (remember Valla) cf. III, 5 = II, 28.

³²⁰ *Op. cit.*, III, 5 = II, 47 f.

regarding its instruments, since the syllogism and induction in logic correspond to the enthymeme and the example in rhetoric, while the method of question and answer is also common to both; in general, their essential identity rests on the necessarily uniform use of language in all areas of human action.³²¹ As we know, the identification of rhetoric and logic in humanist literature served to eliminate the Aristotelian distinction between scientific demonstration and probabilistic argument. Thus the number of forms of argumentation available in every conceivable case could be considerably increased, whereby Nizolio regards this increase as an additional and substantial advantage of the identification of logic and rhetoric.³²²

The upgrading of rhetoric entails for Nizolio too the abolition of the primacy of theory, as the attempt at a restructuring of the Aristotelian ranking of sciences shows. The distinction between theoretical and practical sciences appears as unfounded, since both the former have a practical aspect (thus geometry began with the measuring of plots of land) and the latter require some form of theory.³²³ Among the genuine sciences, there can therefore be no place for metaphysics, which claims to serve pure theory while in reality being empty and useless.³²⁴ Its advocates present three main arguments for its justification: that it perfects and elevates the intellect, specifically not regarding its purely human side, which is cultivated by the remaining sciences, but regarding its divine essence; that there must be a science that is to deal with general concepts which cannot become the object of consideration in any special science; and that only a higher and general science can give principles to the special sciences. To the first argument, Nizolio replies curtly that an empty and false science cannot perfect our intellect. regarding general concepts, they are not the affair of pseudophilosophers, but of grammarians, lexicographers, and linguists, and can be grasped without the slightest help from metaphysics; on the basis of two examples from Aristotelian terminology, specifically the concepts "nature" and "genus," Nizolio makes clear the gap between linguistic and metaphysical interpretation of words and concepts. Finally, he opines that metaphysics has nothing to do with the regulative principles of special sciences, which can borrow everything they need (syllogistic, inductive, and argumentative methods) from dialectic and rhetoric. Parallels between metaphysics and other sciences (e.g.: as medicine deals with health or sickness, so metaphysics deals with

³²¹ *Op. cit.*, 62 f.; Cf.. IIT, 3 = II, 31 ff.

³²² *Op. cit.*, IV,2 = II, 136.

³²³ *Op. cit.*, III, 4 = II, 42f.

³²⁴ *Op. cit.*, 41 f. At this point Nizolio explains that the elimination of metaphysics should not affect theology. This dry and brief explanation is not to be taken entirely at face value. Nizolio makes hints suggesting he breaks away from all theology. Thus he uses the terms God and Nature synonymously (*a Deo sive a natura*, *op. cit.*, I, 6 = I, 59) and furthermore demands the merging of natural science and theology, since God and all divine things hardly differ from natural things (*op. cit.*, III, 4 = II, 45).

substances) are false, since the former deals not with concrete qualities, but with the being as being generally and therefore has no special object on the basis of which it could be distinguished from other sciences and placed above or below them. The uselessness of metaphysics for special sciences shows itself in the inability to think and state anything tangible about the being as being. By the fact that the Latin language called essence *sub-stantia*, it pointed to its necessary connection with the *accidentia*; but if we wanted to consider the accidents exclusively from the view of substance, then we would have to abolish the special sciences. Historical experience proves that metaphysics has offered nothing to the special sciences and helped them to no important discovery. In the long centuries of its rule, on the contrary, it has been the greatest obstacle to the development of a healthy philosophy oriented toward the empirical world.³²⁵

The distance of metaphysics from empirical reality and therefore also from the special sciences results not from false interpretations or clumsy philosophical procedure, but constitutes an incurable disadvantage lying in the circumstances of its origin. As the Peripatetics themselves admit, metaphysics comes about through a double abstraction. These pseudophilosophers assure that mathematics deals with things that are separated from the material world by abstraction, although they belong in themselves to this world; here it concerns thus a logical (*secundum rationem*) and not an ontological (*secundum esse*) abstraction. The objects of metaphysics, however, are separated from the material world not merely by logical, but by ontological abstractions, they are themselves abstractions, and therefore the gap between metaphysics and the reality of the world is unbridgeable.³²⁶ The constitutive abstract-fictitious character of metaphysics is partly reflected, partly generated by its language, which teems with "barbaric" words that are unknown in classical languages and were formed in violation of good taste and the proven rules of everyday language. Nizolio draws up a long list of such words, among which he reckons also the term "metaphysics," which, as he says, was foreign to both the Greeks and the Romans.³²⁷ Appealing to Valla, he demands the use of normal language, in its processing by orators and poets, for philosophical purposes; new words should only be coined if new things, insofar as these are true and useful, should be discovered.³²⁸ Clarity is the supreme commandment for any true philosophy.³²⁹

Since metaphysics is by its nature an abstraction that has autonomized itself from the real world and crystallized in language, *universalia* must stand at its center. Nizolio emphasizes again and

³²⁵ *Op. cit.*, III, 6 = II, 69 ff.

³²⁶ *Op. cit.*, III, 7 = II, 85.

³²⁷ *Op. cit.*, I, Proem. I, 19 f.; III, 6 = II, 69.

³²⁸ *Op. cit.*, II, 2 = I, 146.

³²⁹ *Op. cit.*, I, 1 = I, 28 f.

again that metaphysics stands and falls with universals,³³⁰ and he knows also that their rejection must amount to the abandonment of an essential part of the philosophical tradition, especially since Platonic Ideas and Aristotelian *καθόλου* [universals] hardly differ from one another.³³¹ Of such an abandonment, the iconoclast feels, of course, no fear, and besides he opines that the philosophical tradition is not one-sided, but can also provide good arguments for his positions. Thus he refers explicitly to the Nominalists to reject universals.³³² General predicates like "man" or "animal" can be a genus or species or mean such only metaphorically, i.e., when a single being steps into the place of many or all and the singular replaces the plural; such predicates are thus attributed only as words, not in the factual sense. The sentence "Socrates is a man" means only that Socrates is a human being, and the word "man" is used in the improper sense or metaphorically if it does not mean a concrete individual being.³³³ Assuming universals existed, they would have to fragment themselves to incarnate in individual beings, yet at the same time remain uniform; but how can one claim that the same whole "man" is simultaneously in London, Rome, and Babylon?³³⁴ Unfounded is also the view that universals result from abstractions, since abstractions are simply impossible here. For from what is one to abstract? From one individual, from many, or from all? If from one or from many, on the basis of what criteria should the selection be made? And if from all—who has ever been able to find and collect all individuals of a genus?³³⁵

If universals have no backing in the real, they can only root in the metaphorical use or abuse of language. The word *universalium*, writes Nizolio, stems from the adjective *universus*, which was used in Latin in a quite different sense. By it was meant namely not an abstract whole independent of its components, but a set of individuals that was envisaged simultaneously and uniformly. The opposite of *universus* was the individual thing in its individuality, as several examples show which Nizolio takes from classical authors.³³⁶ Language itself makes clear how misleading the use of *universalis* can be, when it rejects expressions like *universalis populus* or *universalis natura* and prefers the phrases *universus populus* and *universa natura*.³³⁷ Therefore, the "pseudophilosophers" violate correct language usage when they connect the word *universalis* with the idea of an entity that is in itself uniform, but at the same time capable of participating in several individual things; it cannot be perceived, but is constructed by the intellect on the

³³⁰ *Op. cit.*, III, 1 = II, 15; III, 6 = II, 70.

³³¹ *Op. cit.*, I, 1 = I, 29.

³³² *Op. cit.*, I, 8 = I, 90; I, 6 = I, 65.

³³³ *Op. cit.*, I, 7 f., 80, 84, 86.

³³⁴ *Op. cit.*, 90.

³³⁵ *Op. cit.*, III, 7 = II, 86 f.

³³⁶ *Op. cit.*, I, 6 = I, 61.

³³⁷ *Op. cit.*, I, 7 = I, 74.

basis of several individual things, yet is supposed to be really present in these things and may be attributed to them as a predicate.³³⁸ Nizolio wants to show concretely from which linguistic aberrations the most important universals have arisen. Thus he makes considerations on the nature of nouns to analyze "genus" and "species." Nouns divide, as is known, into proper names (*propria*) and generic names (*appellativa*). The former refer always to concrete individuals and therefore allow no misunderstandings to arise; the problem lies thus with generic names. Such a one is assigned simultaneously to several individuals through several statements—and genera are finally nothing other than names that are attributed to several mutually independent individuals. Names like "man" or "animal" mean a genus or species only if they are used metaphorically, and the common nature they indicate through this metaphorical use is nothing independent, but a set composed of separate individuals. With the word "animal," one can connect various others, such as "cattle" or "lion," and this does not mean, of course, that cattle and lion are identical, but only that "animal," like all other genus and species concepts, refers to several mutually separated individuals. This becomes more understandable if we remember that generic names divide into simple (*simplicia*), such as "animal," and *collectiva*, such as "army," and that all simple generic names are in reality collective names; "animal" thus means a set of independent individuals just as much as "army." Genera and species are accordingly only collective generic names and contain nothing else except the individuals of which they are composed. If the "pseudophilosophers" were consistent, they would have to form universals not only from simple but also from collective generic names. But it is obviously nonsense to construct a universal "army" to subsume under it the individual armies, each of which already comprises a set of individuals.³³⁹

Nizolio also presents the difference between nouns and adjectives in such a way that the transformation of qualities expressed adjectivally into universals is excluded. Adjectives stem from nouns ("wooden" from "wood") and point to a property that does not exist in itself, but in something. While nouns mean simultaneously a substance and a property (wood is *eo ipso* wooden), adjectives restrict themselves to indicating properties. This insurmountable semasiological difference between noun and adjective lies precisely in the fact that properties cannot exist as independent entities, thus separated from the substances in which they are perceived; no human has ever tasted sweetness in itself or seen height in itself.³⁴⁰ Nizolio uses the same reference to the different linguistic function of noun and adjective to unmask another universal, the *differentia*, as fiction. Difference can be thought in two ways, i.e., either as

³³⁸ *Op. cit.*, I, 6 f., 63 f.

³³⁹ *Op. cit.*, I, 41, 42 ff., 51 f.

³⁴⁰ *Op. cit.*, I, 5 = I, 55 f.

difference that itself differs from something else (*differentia differens*), or as difference that causes something to differ from something else (*differentia differre faciens*). The former is a universal, takes the form of a genus or species, and stems from various adjectives such as e.g. ensouled, rational, etc. The latter is expressed on the contrary by a noun (soul, reason) and serves not for the delimitation of a group of individuals through the hypostatization of a certain property of theirs, but for the naming of a concrete factor that effects the differentiation of concrete things from one another; thus everyday language does not say that the ensouled as such differs from the soulless as such, but it says rather that ensouled things differ from soulless ones insofar as they have a soul.³⁴¹

Nizolio's critique of the language of metaphysics continues Valla's analogous efforts and deepens them in many points. Beyond that, however, Nizolio's approach contains an original and path-breaking aspect. It concerns here the conscious effort to replace the qualitative consideration of scholastic-Aristotelian ontology with a quantitative one, i.e., to displace the hierarchy of qualitatively different substances by the horizontal compilation of quantities that differ from one another only quantitatively. The world is thus seen with new eyes: as a quantity of individual things that are either isolated or constitute groups of a specific size respectively; something else is excluded.³⁴² This view, which, as we shall see, paves the way for mathematical natural science, can already be traced in embryo in Valla, since it ultimately results from the rejection of the concept of *esse* and the *transcendentalia* connected with it. At any rate, Nizolio refers to Valla when he rejects *esse* and the system of categories, regarding *res* as the only highest genus and subsuming under it both *ens* (= *ea res quae est*) and the *transcendentalia* (e.g. *unum* = *una res* etc.).³⁴³ Furthermore, Nizolio approves of Valla's drastic reduction of the number of Aristotelian categories and even wants to take a further step in the same direction: instead of the three categories Valla assumed (*substantia, qualitas, actio*), he allows only two to stand, namely substance and qualities (accidents) or independent and non-independent things;³⁴⁴ he also finds the term "categories" itself superfluous, since for him substances and qualities are equally species of the highest genus *res*.³⁴⁵ In this way, the first rough classification of individual things that make up the world comes about. Remarkable is the exact correspondence between the universe of things and the universe of language. The two basic classes of things, i.e., substances and accidents, can for their part consist of two kinds of things each, i.e., either of isolated individual things or of quantities or groups of individual things; altogether there are thus four large classes of things. But there are just as many classes of names (nouns, adjectives, proper

³⁴¹ *Op. cit.*, II, 5 = I, 152 f.

³⁴² *Op. cit.*, I, 4 = I, 49.

³⁴³ *Op. cit.*, II, 8 = I, 190 f.

³⁴⁴ *Op. cit.*, II, 9 = I, 195, 196 f.

³⁴⁵ *Op. cit.*, II, 10 = I, 207.

names, generic names) and everything that does not belong to them is mere imagination, like the chimeras and centaurs of the poets or the second (intelligible) substances and universals of the "pseudophilosophers."³⁴⁶

Proceeding from these considerations, Nizolio now attempts to transform all qualitative stages of the scholastic-Aristotelian ontological hierarchy into quantitative quantities. From his quantitative view, he first considers the concept of a Whole to be empty, which allegedly exists before its parts or represents something more than these latter; such a concept of the Whole resembles universals.³⁴⁷ For Nizolio there can be only two kinds of Whole: the continuous (*continuum*), i.e., an undivided individual, and the discrete (*discretum*), which consists of a quantity of individuals. Accordingly, there are two kinds of division of a Whole (*divisio* and *partitio*) as well as two kinds of composition of such.³⁴⁸ Genus and species are precisely such discrete wholes (although not every discrete whole constitutes a genus or species) and, being purely quantitative quantities, they also relate to one another purely quantitatively, i.e., genus and species stand in the same relationship to one another as Whole and Part.³⁴⁹ Nizolio emphasizes the quantitative character of the genus particularly. "Genus," he writes, is: a) a word consisting of five letters and two syllables; b) a simple generic name expressing that real quantity we call "genus"; c) if we pass from words to things, then "genus" means a quantity or a discrete whole consisting of the species belonging to it.³⁵⁰ The other universals (*species*, *differentia*, *proprium*, *accidens*) are also quantified in the appropriate manner respectively. Thus the species becomes a genus if one views it in the perspective of the individuals of a lower or narrower species; the *differentia* too is nothing other than *genus differens*, if it is attributed to all individuals of a genus, as indeed it must be attributed, and similarly it stands with the *proprium* and the *accidens*.³⁵¹ The strategy for dissolving universals is, in other words, the following: properties are not hypostatized, but attributed to concrete individuals, which for their part form

³⁴⁶ *Op. cit.*, I, 6 = I, 59 f.

³⁴⁷ *Op. cit.*, I, 10 = I, 111.

³⁴⁸ *Op. cit.*, 107.

³⁴⁹ *Op. cit.*, II, 2 = I, 142. Remember that even for Occam, genus and species did not relate to each other as whole and part (*Summa logicae*, I, 21 = S. 68).

³⁵⁰ *Op. cit.*, II, 1 = I, 118 f. Aristotle's error lay in confusing the real nature of the genus with its nature as a generic name; the Stoics, in turn, confused the mental grasping of a thing with the thing itself. Against this, Nizolio asserts that the true essence, which a definition has to grasp, is found not in the concepts of thought, but in the things existing independently of them (*op. cit.*, 117 f.).

³⁵¹ *Op. cit.*, I, 9 = I, 97.

a quantitatively understood genus.³⁵² In particular for the *differentia* and the *proprium*, this means that they are not defined specifically, but transform into movable and changeable quantities that must adapt to the respective grouping of individual things. The *differentia* indicates, of course, what separates a group of things from another, while the *proprium*, i.e., the characteristic property of a group, connects the various individual things with one another and makes a group out of them. Separation and connection remain relative, however, they are always defined with reference to something, and therefore *differentia* and *proprium* can replace one another depending on the framework in which they appear and function so or so.³⁵³

To the extent that the critique of universals amounts to a quantitative consideration of the things of this world, it produces a new conception of the nature and tasks of science. In the scholastic-Aristotelian perspective, metaphysics had to represent the highest science, since science was defined as knowledge of the first causes and since these causes were sought in the realm of the supersensible with the means of the intellect. The denial of universals implies that science must orient itself by the empirical world and abandon, indeed destroy, the traditional evaluation or hierarchy of ontological levels; its object are henceforth individual things, whose complete rational knowability as such Aristotelian science denied. Of course, Nizolio opines that the knowledge of individual things can be attained in two ways, i.e., either separately for each thing or according to groups of things, and he adds that the isolated knowledge of an individual thing, although possible, produces no science; thus zoology cannot be a science of a single animal, for then it would have to start all over again after its death. Science therefore deals primarily with groups, which are in themselves stable and continuous, since their individuals reproduce themselves and thereby confirm the validity of scientific findings and definitions anew.³⁵⁴ By turning the traditional view of science on its head, Nizolio asserts that our thinking refers not necessarily to general supersensible concepts, but just as well (and indeed exclusively, if it does not err) to empirical individuals or groups of such individuals.³⁵⁵ Thus, with one blow, a double result is achieved: thinking is placed in the service of the purposes of the new science and at the same time under the control of experience. This shows itself in Nizolio's juxtaposition of universals and groups of individuals (thus of *universalia* and

³⁵² Thus, e.g., "rational" and "mortal" are not *differentia* of man, but *genera* into which man is to be classified; similarly, "risibile" is not a *proprium* but a genus comprising individuals; and finally, "white or black" are not accidents but genera comprising individuals (*op. cit.*, 97 f.).

³⁵³ *Op. cit.*, II, 3 f., 152, cf. 160. Thus *sentire* forms a *differentia* when we want to distinguish animals and plants from each other, while the same word signifies a quality when we draw the dividing line between rational and irrational animals, both of which possess sensibility.

³⁵⁴ *Op. cit.*, I, 7 = I, 70 f., 75, 77.

³⁵⁵ *Op. cit.*, III, 7 = II, 82 f.

universa), i.e., of the object of the old and the object of the new science. The fact that both can be grasped intellectually must not obscure their essential difference from one another. For with regard to universals, the work of the intellect remains purely abstracting, i.e., it rests on the conviction that the individual thing cannot be known in itself and therefore it must be overcome by abstracting thought work, by finding its substance and ordering it into the ontological hierarchy at the appropriate place; in contrast to this, the *universum* is established through the work of an intellect that singles out individual things in order to then include them in groups according to their relationships to one another. This inclusion (*comprehensio*) is the work of the intellect that produces a *universum*, while *abstractio* calls a *universalium* into life. Between *universum* and *universalium* there are also other differences, the most important of which is that the former, in contrast to the latter, can be perceived by the senses.³⁵⁶

The juxtaposition of *comprehensio* and *abstractio* amounts thus to that between two different kinds of science, namely a metaphysical and an anti-metaphysical one. The *comprehensio* is the concrete methodical expression that the quantitative consideration of things assumes when the task of the intellect is not finding out their substance through abstraction, but such a grouping of individuals that a general statement about them becomes possible; for empirically grounded statements can be formulated on the basis of the investigation of every single individual and not on the basis of its abstract general concept.³⁵⁷ Quantitative consideration is further consolidated by the questioning of those forms of syllogism or induction that made use of universals. Like Nizolio's *universum* differs from the *universale*, so his view on the individual thing (*singulare*) differs from the *particulare*, i.e., the antithetical counterpart of the *universalium*. Syllogism or induction form no longer a transition from the *particulare* to the *universalium*, but additions and subtractions in which entire quantities of individual things participate; in the (deductive) syllogism, one proceeds from the discrete whole to the parts, in induction the procedure is reversed. The syllogism must not rest on the principle *dici de omni et dici de nullo*, i.e., attribute a predicate either to all individuals of a genus or to none of them, but it must pose the concrete questions whether one or more things form components of a discrete whole or not, whether this or that genus constitutes part of an even more extensive one, etc.³⁵⁸ The enforcement of quantitative consideration becomes finally visible in the replacement of *demonstratio* as knowledge of the causes of a thing by the demand for its complete description. Nizolio considers the Aristotelian *demonstratio* impossible already because so far there has been no concrete example of it—quite apart from the fact that the Peripatetics themselves, who all appeal to Aristotle, understand something different by it, i.e., sometimes a *definitio subjecti*, sometimes a *definitio praedicati*. But also as *sylogismus scientialis*, which raises a claim to the

³⁵⁶ *Op. cit.*, 80; I, 7 = I, 71 f.

³⁵⁷ *Op. cit.*, III, 7 = II, 85.

³⁵⁸ *Op. cit.*, I, 7 = I, 78 f.

knowledge of causes, *demonstratio* does not hold water. The Aristotelian conviction that complete knowledge is that of causes can only be correct if by it is meant that ignorance of the cause forces us to seek it, whereby we discover ever new things and constantly expand our knowledge—it is correct, that is, if it is interpreted and applied inductively and not deductively. But it is also quite possible that the question of causes does not arise at all, e.g., when we want to know whether the people of the Antipodes exist, and demand a description of them.³⁵⁹ Obviously, Nizolio is interested in a form of knowledge that differs essentially from the traditional-metaphysical one.

The important steps of Nizolio towards the empirical-quantitative conception of scientific knowledge make understandable why he devotes much less attention to the doctrine of the *Topoi* and its further development than the earlier Humanists.³⁶⁰ Although he distinguishes, with all strong aversion to Aristotelianism, between the abstract and unusable Aristotle (thus Aristotle as logician and metaphysician) and the empirically oriented and therefore usable Aristotle (thus Aristotle as ethicist and political philosopher),³⁶¹ whereby he reminds of Bruni, he nevertheless does not strive to utilize and further develop the "fruitful" Aristotelian insights, but seeks new paths. Therein lies the special significance of this thinker in the intellectual spectrum of the 16th century. This is, of course, no reason for us to overlook his limits, which make themselves felt in two aspects of his theories. The first concerns the question of creating an abstract-general scientific conceptualization. In his attempt to replace universals with *universa*, he concerns himself exclusively with the quantitative extension and not with the qualitative content of concepts. If in the sentence "Socrates is a man" the word "man" means only *a* man, as Nizolio wants, then it cannot form a predicate, since it indicates only quantity, not quality. If "Socrates" and "man" or subject and predicate basically constitute only a tautology, then individual and genus coincide and we possess no criteria to form those *universa* that Nizolio himself regards as indispensable for science.³⁶² On the other hand, Nizolio combats within the framework of his fundamental struggle against abstractions the view that sensible properties or natural objects could be grasped mathematically,³⁶³ and he generally underestimates the epistemological value of mathematical thinking. This attitude runs counter to the basic principles that mathematical natural science adopted a little later. This [science] has indeed not been able to reduce sensible properties to mathematical quantities, but it has abstracted from them in order to be able to grasp natural bodies mathematically; thereby it introduced the

³⁵⁹ *Op. cit.*, IV, 4 = II, 148 f., 151.

³⁶⁰ *Op. cit.*, IV, 1 = II, 107 ff.

³⁶¹ *Op. cit.*, III, 7 = II, 80.

³⁶² Glossner, *Nicolaus und Nizolius*, 156 ff.

³⁶³ *De veris principiis*, III, 7 = II, 87 f.

distinction between primary and secondary qualities, while simultaneously creating a conceptualization that was essentially different from that which Nizolio considered adequate. Nizolio's overall position corresponds thus still to the pre-mathematical phase of anti-scholastic thought. At the same time, however, it has overcome the classical humanist phase of this same thought, although it roots in it. Therein lies, as we must repeat, Nizolio's special significance in the intellectual history of the 16th century.

e. Zabarella and the Autonomization of Logic as a Methodological Organ

Zabarella's work stands at the intersection of two directions whose origins are radically different, but which intertwine and influence each other,³⁶⁴ paving the way for the modern concept of method that is adopted and finally formed shortly thereafter by mathematical natural science. Zabarella wants to be an orthodox Aristotelian, but his ideas take shape within the intellectual atmosphere created by the humanist critique of scholastic Aristotelianism, and therefore his view of Aristotelian philosophy in general and Aristotelian logic in particular contains essential anti-scholastic and anti-metaphysical elements. The humanist primacy of rhetoric over logic implied a turn from the Aristotelian-metaphysical concept of science and truth to the fluctuating world of human action, in which only probabilistic arguments apply, which are codified in the doctrine of the *Topoi*. The agnostic view of the limits of human intellect and knowledge legitimized this turn and at the same time suggested the idea that there are two kinds of logic—specifically in accordance with the Aristotelian separation of ontological levels from one another, which, however, was accepted here only to reverse the priorities subsequently. These two kinds are the logic of absolutely certain metaphysical knowledge, which refers to an immutable eternal object, and the logic of the probable truth of the finite and changeable human world. Since, however, the former is considered unattainable, only the latter remains available to us for our practical purposes. This view of the two logics, one of which is detached from metaphysics and therefore usable, spreads in humanist circles in the 15th and 16th centuries³⁶⁵ and obviously influences Zabarella, in whom precisely the detachment of logic from metaphysics goes hand in hand with the transformation of logic into a practically effective organ for the investigation of This-World and for the classification of all data of human (finite)

³⁶⁴ See above Sect. 4 a.

³⁶⁵ On Poliziano's and Speroni's views on this, see Garin, *Medioevo e Rinascimento*, 128–130, 135 f.; on Al. Piccolomini and Tomitano see Vasoli, *Studi*, 273 ff., 292 ff.

knowledge.³⁶⁶ The immediate connection of this tendency with the denial of metaphysics as rational knowledge is shown by the fact that clear traces of it can be found already in Occam.³⁶⁷

Zabarella accepts indeed the autonomization of logic and strives for its reorientation, but as the good Aristotelian he wants to be, he shows himself unwilling to push logic aside in favor of the doctrine of the *Topoi*. His Aristotelianism manifests itself thus as adherence to the ideal of certain and not merely probable knowledge, quite independently of its object. Of the important worldview consequences of adherence to the Aristotelian concept of science precisely at the moment when the traditional metaphysical object of Aristotelian science was abandoned, we will speak further below. At this point, at any rate, Zabarella's paths separate from those of the Humanists. On the basis of his Aristotelian premises, Zabarella regards rhetoric not as the methodology of theoretical or ethical, but only of political sciences.³⁶⁸ Simultaneously, he distinguishes between logic and dialectic, considering the latter a mere part of the former, which deals exclusively with the juxtaposition of mutual arguments about a certain point of contention (*disputatio*).³⁶⁹ And he separates logic naturally strictly from the doctrine of the *Topoi*, since this

³⁶⁶ Zabarella's influencing by the humanist movement or rather by the humanist mixture of nominalist commonplaces and lively critique of Scholasticism is very well depicted in Corsano (*Strumentalismo logico*, esp. 508–512). Similar views are represented by Vasoli, *Studi*, esp. 271 f., 320 f., 335 f. Both researchers turn against Randall's thesis that Zabarella had nothing to do with Humanism but paved the way for Galilei, and they use the argument that Zabarella did not practice empirical research and did not connect his methodological views with research practice, but rather refined the logical instruments of Aristotelianism while remaining within its framework. Although Randall's view on Zabarella's relationship to Humanism is wrong (cf. above note 229), it must be noted on the other hand that Zabarella's staying away from empirical science does not automatically exclude the possibility of an influence on Galilei by his methodological views. The connection between scientific practice and scientific method is namely not to be understood literally, since the latter often represents only a retrospective rationalized self-confirmation of the former. That is: results, which scientific practice arrives at in its immanent and quasi-instinctive dynamic, are presented as products of the deliberate application of a method when, at a later stage, they receive a logically coherent and systematic formulation. The appeal to method serves indeed to underpin the claim to objectivity of the results, but in itself it cannot justify it. If we view the function of method in this way, then it is not surprising that the methodologist Zabarella could have influenced Galilei without having himself proven the practical value of his method through his own empirical research. Cf. below Ch. II, note 92.

³⁶⁷ In contrast to metaphysics, Occam writes (*in Sent.* I, dist. 23, qu. 1 D), the task of logic consists not in finding out whether something real corresponds to a term, but only in determining the function of the terms. Elsewhere (*I Sent.*, Prol., q. 11 N) he explains that logic is of a practical, thus not theoretical, nature, and not in the sense of ethics, which establishes normative rules (*practica dictativa*), but in the sense of the mechanical arts, which teach how something is to be done when the decision to do it has already been made (*practica ostensiva*).

³⁶⁸ *De natura logicae*, II, 13–15 = *Opera*, Col. 78–85.

³⁶⁹ *Op. cit.*, I, 9 = *Opera*, Col. 20.

can neither be applied to science nor is it a *scientia* itself.³⁷⁰ In contrast to the etymologically underpinned assertions of a Valla or Nizolio about the essential kinship between logic and the spoken word, Zabarella believes that logic has to do with *Logos* in the sense of intellect and not in the sense of speech.³⁷¹ His Aristotelian concept of science cannot be reconciled with a logic that is subject to the unclarity and instability of the spoken word. Perhaps Zabarella was not unaware of the views of extreme agnostics like Sanchez, who saw in the constant flux of language an insurmountable obstacle to the formation of a reliable logic and to the attainment of certain knowledge in general.³⁷² The possibility of such a philosophical interpretation of the consequences of humanist interest in language must have had the effect that Zabarella felt even safer in the ordered terrain of Aristotelian logic. This constituted, incidentally, in itself an indication that the intellectual-historical role of Humanism was gradually exhausting itself.

Zabarella grounds the separation of logic from metaphysics through the distinction between *primae notiones* and *secundae notiones*. The former are names that refer to things like "man" or "animal," the latter are also names, but refer to other names like "genus," "species," "syllogism," etc.³⁷³ The concepts of logic are thus not formed and used in the direct encounter of thought with things, but rather in the attempt of thought to order and utilize for its purposes the names that arose from direct contact with things; in this sense, logical concepts move on a fictitious level, and Zabarella calls them *cogitationes fabricatae*.³⁷⁴ Since logic has nothing to do with things themselves, it cannot be a *scientia* and must rather be reckoned among the *artes*; its true definition should read *instrumentum philosophiae*.³⁷⁵ But if logic is an instrument of knowledge, this should not mean that every instrument of knowledge can be classified as logic.³⁷⁶ Grammar has just as much instrument character as logic, yet it deals with language and not with concepts, which is why—as Zabarella emphasizes against the Humanists—it varies according to time and

³⁷⁰ *Op. cit.*, I, 6 = *Opera*, Col. 14.

³⁷¹ *Op. cit.*, II, 16 = *Opera*, Col. 85 (*logica est a ratione, non ab oratione*).

³⁷² *Quod nihil scitur* = *Opera*, 5; cf. 2, where the humanist view is rejected that only the classical languages are uncorrupted and genuinely philosophical. It must be recalled here that in the time in which Zabarella grows up intellectually, a renewed Aristotelianism forms as a reaction against the skeptical consequences of the humanist mixing of rhetoric and dialectic/logic, which propagates the ideal of a strict method based on demonstration and analysis; the humanist influence shows itself here in the fact that the Neo-Aristotelians take the problem of *inventio* much more seriously. On the most important representatives of this direction, namely Viotti, Scheckius, and Aconcio, see Gilbert, *Renaissance Concepts*, 152 ff., 180 ff., as well as Vasoli, *Dialettica*, 521 ff.

³⁷³ *De natura logicae*, I, 3 = *Opera*, Col. 6. Occam emphasized the same distinction and used the terms *primae* and *secundae intentiones* (*I Sent.*, dist. 23, qu. 1 D).

³⁷⁴ *Op. cit.*, Col. 8.

³⁷⁵ *Op. cit.*, I, 6 = *Opera*, Col. 15; cf. I, 10 = *Opera*, Col. 21 (*disciplina instrumentalis* or *habitus instrumentalis*).

On the sense in which logic is *ars*, see *op. cit.*, I, 8 = *Opera*, Col. 17.

³⁷⁶ *Op. cit.*, II, 16 = *Opera*, Col. 85.

nation.³⁷⁷ Thanks to the constancy of its content, logic is the instrument *par excellence* of science and philosophy. Nevertheless, it remains a mere instrument. Against those who want to assign logic its own real object (as Thomas does the *ens rationis*), Zabarella argues that only theoretical sciences have such an object, while the purpose of logic lies not in knowledge, but in the production of instruments for the attainment of knowledge.³⁷⁸ In the same place, the view is emphatically rejected that Aristotle had assigned logic its own real object just like theoretical science. Zabarella's argumentative tactic consists in presenting the separation of logic from metaphysics or the instrumental character of the former as a genuinely Aristotelian view and thus hiding his own revision of Aristotelianism behind Aristotle's authority. He therefore does not admit that the Aristotelian writing on the categories has anything to do with metaphysical problems.³⁷⁹ Just as emphatically does he deny the metaphysical implications of the Aristotelian doctrine of definition (of substance), which in his view has a purely methodological character, i.e., connects exclusively with the demonstrative method,³⁸⁰ even if its methodological value is small, since it opens no way to finding new data.³⁸¹ Metaphysicians err when they think definition grasps the *quidditas* of a thing. Definition is word, speech, and points only indirectly to the essence of the thing, as this essence appears in the perspective of the concepts of our thinking;³⁸² between definition and the essence of a thing exists the same relationship as between the thing and its name.³⁸³

In its detachment from metaphysics and as an instrument of science, logic has the task of showing the way (*μεθ-οδος*) we must take to arrive at new knowledge on the basis of what we already know.³⁸⁴ As one can see, knowledge is conceived dynamically here, namely more as an open, continuous process than as a finished result. Such a conception of knowledge could, however, only be presented after the autonomization of logic vis-à-vis metaphysics: for in the metaphysical evaluation of knowledge, fixed, immutable quantities stood in the center, the finding of which put an end to research. The fixed ontological order had to be reflected here in an equally fixed system of knowledge. Zabarella does not believe, however, that his own ideal

³⁷⁷ *Op. cit.*, I, 10 = *Opera*, Col. 22 f.

³⁷⁸ *Op. cit.*, I, 17 = *Opera*, Col. 41 f.; cf. I, 14 = *Opera*, Col. 33 f. Zabarella explains that logic, although it is not a theoretical science but only a practical instrument, finds its application exclusively in the theoretical and not in the ethical-practical disciplines; it thus seeks the true, not the good (*op. cit.*, I, 13 = *Opera*, Col. 33). Cf. above note 358.

³⁷⁹ *Op. cit.*, II, 3 and 5 = *Opera*, Col. 58 and 63.

³⁸⁰ *De Methodis*, IV, 15 = *Opera*, Col. 303.

³⁸¹ *Op. cit.*, III, 11 = *Opera*, Col. 246.

³⁸² *Op. cit.*, IV, 12 = *Opera*, Col. 300 f.

³⁸³ *Op. cit.*, III, 13 = *Opera*, Col. 249.

³⁸⁴ *De natura logicae*, I, 10 = *Opera*, Col. 23.

of knowledge is served by an all-sided, harmonious, and closed system of knowledge. That is ultimately the—anti-metaphysical—sense of his famous distinction between order (*ordo*) and method of knowledge. Both are indeed, as he writes, logical instruments that allow us to know the unknown with the help of the already known; but they do it in different ways, and therefore *ordo* cannot be regarded as method in the proper sense. It serves rather teaching purposes, i.e., it does not discover what science has not yet recognized on the basis of what is already recognized, but it orders the sum of already existing knowledge in such a way that in teaching the student can most easily pass from what he knows so far to what he does not yet know, but will know with certainty since it is already known to science. For the actual method, however, the transition from the known to the unknown has a completely different meaning. Here the concept of the unknown is not subjective and relative (it refers, that is, not to the provisional level of knowledge of the student), but it is objective, it encompasses namely everything that man has not yet recognized, everything that science must still discover. Method makes discoveries with the help of necessary inferences (*illatio*), which result from the processing of already known data. The use of *illatio* distinguishes precisely method from *ordo*; method has nothing to do with the arrangement of the various parts or branches of science, and for the simple reason that it has no finished and complete science in mind, but special open questions, the investigation of which leads to the enrichment and progress of knowledge.³⁸⁵ In contrast to the narrower didactic purposes of *ordo*, the task of method consists in revealing what was hitherto hidden and unknown to all.³⁸⁶

The anti-metaphysical point of the distinction between *ordo* and *methodus* becomes even clearer when we think of the different areas of application of *resolutio* [analysis] and *compositio* [synthesis]. Basically, *ordo* and *methodus* can make use of analysis and synthesis equally, but practically Zabarella tends to bind *ordo* to synthesis and method to analysis; in this way, the ideal of an all-sided and coherent knowledge derived from ultimate principles—thus the metaphysical ideal of knowledge—appears as a merely didactic matter and not as a way to expand our horizon of knowledge. As the Aristotelian he is, Zabarella acknowledges that the synthetic-demonstrative method, which aims at the knowledge of a thing by means of the knowledge of its causes, is suitable for perfect science, but at the same time he considers such a science unattainable because of the limits of human cognitive faculty; attainable for us is not *perfecta scientia*, but *inventio* with the help of the analytic method, which starts from effects and leads us to the causes knowable to us, in order subsequently to make the effects themselves

³⁸⁵ *De Methodis*, I, 3 and III, 2 = *Opera*, Col. 139, 225.

³⁸⁶ *Op. cit.*, I, 9 = *Opera*, Col. 150 f. On the distinction between *ordo* and *methodus* on the basis of the triple meaning of *notior* see *op. cit.*, I, 8 = *Opera*, Col. 148 f.

better understandable in the light of the achieved knowledge of causes.³⁸⁷ If method, if it wants to be fruitful, is primarily analytic, then *ordo*, in which theoretical sciences are classified for didactic purposes, must remain synthetic.³⁸⁸ By emphasizing the exclusive binding of synthesis to teaching and its requirements, Zabarella loosens its relationships to scientific *inventio* considerably. This shows itself precisely when he has to admit that analytic *ordo*, in contrast to synthetic, exhibits certain commonalities with method; but he hastens to downplay the significance of this finding by opining that analytic *ordo* is similar to method not as *ordo*, but as analytic.³⁸⁹ In his constant endeavor to support his theses on the authority of Aristotle, he asserts that the analytic or synthetic structure of Aristotelian writings is attributable only to didactic considerations and not to the character of the questions discussed in each case, as some thought.³⁹⁰ Aristotle did not explicitly point this out and developed no special doctrine on *ordo* because he addressed his own students and not, for instance, (other) teachers; he thus gave no advice on how a science must be structured for didactic purposes, but he offered science itself in an ordered form.³⁹¹ Precisely because this explanation is far-fetched, it shows how important the argumentative underpinning of the above-mentioned anti-metaphysical positions was for Zabarella.

As said, method is primarily analytic because of the limitation of human intellect and the consequent renunciation of knowledge of ultimate ontological principles. But synthetic *ordo* too, which seems to embody the Aristotelian ideal of knowledge, remains a form of knowledge structured in a certain way precisely with regard to human or didactic purposes. Zabarella indeed holds to the Aristotelian conviction that the best knowledge is knowledge *ex causis*, but by restricting its scope of validity to the didactic purposes of *ordo*, he withdraws the ontological implications from it. From the moment an agnostic standpoint is taken (in tacit agreement with the humanist critics of scholastic Aristotelianism), the traditional primacy of ontology is simply forgotten, while at the same time the view solidifies that knowledge is an affair that necessarily takes place within the human perspective and cannot overcome the same. Things cannot be seen otherwise than with human eyes, and therefore the order of knowledge can never be replaced by the genuine order of things. Zabarella proceeds from this fundamental attitude when he questions the well-known Aristotelian distinction between *πρότερον φύσει* [prior by nature] and *πρότερον πρὸς ἡμᾶς* [prior to us] and comes to the conclusion that only what precedes in the series with regard to us or the human perspective has practical relevance. For Zabarella, the

³⁸⁷ *Op. cit.*, III, 18 = *Opera*, Col. 267.

³⁸⁸ *Op. cit.*, II, 7 = *Opera*, Col. 182.

³⁸⁹ *Op. cit.*, II, 18 = *Opera*, Col. 217 f.

³⁹⁰ *Op. cit.*, I, 6 = *Opera*, Col. 142 f.

³⁹¹ *Op. cit.*, IV, 22 = *Opera*, Col. 331.

view that the cause is more knowable by nature than the effect, while with regard to us the reverse holds, can solve no problem; for regardless of which path the demonstrative procedure takes, regardless thus of whether we want to go from cause to effect or from effect to cause, the demonstration takes place by us and for us—not for nature. Initially, the effect is more known to us, but when we have advanced to the cause by analytic means, then it is more known to us and we return to the effect to understand it anew and deeper on the basis of the meanwhile achieved knowledge of the cause.³⁹² Aristotle, Zabarella opines, declared causes or principles the starting point of the demonstrative procedure not because they precede by nature, but because this arrangement is most suitable for our knowledge; Aristotle's standard was thus the nature of human knowledge and not the nature of things.³⁹³ Zabarella turns the traditional ontological hierarchy on its head even when he combats the view that the causes or principles of things are not best known to us: he leaves aside the level of Being, on which perceptible things take the first place among things known to us, and concentrates on the cognitive and logical level, on which causes and principles are the first in the series with regard to us. Thus logic constitutes nothing other than a study of the human perspective of knowledge, since its object are the *secundae notiones*, which represent things not in themselves, but as they are grasped by us.³⁹⁴

Zabarella undermines traditional metaphysics not only by eliminating the primacy of ontology in favor of a consideration of things from the human perspective of knowledge, but also by upgrading the sensible world by envisaging the application of strictly logical methods in its investigation. If for traditional metaphysics only the supersensible world was capable of a purely intellectual-logical grasping, it is obvious that the decision to attribute the same capability to the sensible world implied its ontological upgrading. Here too, Zabarella starts from orthodox Aristotelian positions and, by reinterpreting them, turns the old hierarchies practically upside down, although they remain nominally untouched. Things in general, writes Zabarella referring to Aristotle, can be separated into two classes: the *necessaria*, which are independent of human will, and the *contingentia*, whose realization depends on human acts of will and actions. Accordingly, the branches of knowledge divide: some deal with the first class of things and are theoretical, some with the second and are practical. Zabarella places special value, just like Aristotle, on the thesis that actual science (*scientia*) can only be theoretical, since its object must be necessary and fixed; genuine sciences are therefore only metaphysics, mathematics, and physics.³⁹⁵ Interestingly, Zabarella avoids mentioning metaphysics when he

³⁹² *De Regressu*, II = *Opera*, Col. 481 f. This double demonstrative procedure is described in Chap. V, Col. 488 f.

³⁹³ *De Methodis*, I, 8 = *Opera*, Col. 147.

³⁹⁴ *De natura logicae*, I, 3 = *Opera*, Col. 7.

³⁹⁵ *Op. cit.*, I, 2 = *Opera*, Col. 2 f.

speaks of the application of logic to theoretical sciences, and relates his discussions primarily to physics and mathematics. Natural philosophy, he writes, is nothing other than logic in its application to natural objects, it is, in other words, the ensemble of propositions, syllogisms, and inductions resulting from that application; the same is the case in arithmetic, geometry, and the other sciences.³⁹⁶ Metaphysics is here indirectly but clearly downgraded, for Zabarella, who otherwise adheres to the Aristotelian distinction between theoretical and practical sciences, shows no interest in the hierarchy within the class of theoretical sciences, he does not say, that is, that the object of physics is less necessary and fixed than that of metaphysics, but uses the distinguishing criterion *necessitas-contingentia* merely to separate theoretical and practical sciences from one another. The object of physics, i.e., nature, seems thus to be structured with strict necessity, which permits the unreserved application of logic to it as well as the formulation of hypotheses about its unknown aspects on the basis of what we already know about it.

This fundamental and path-breaking view is explicitly articulated by Zabarella. The *inductio demonstrativa*, he writes, finds application with regard to necessary things which connect with one another on the basis of their nature; therefore we need not know all individuals to form the correct idea of the whole; knowledge of some of them as well as of their necessary connection with one another is completely sufficient.³⁹⁷ This conception, which reminds one directly of Galilei, proves the importance of Zabarella's methodological investigations in their connection with the revolution of traditional metaphysical hierarchies. The paradox in Zabarella's case lies in the fact that he arrives at this position in a roundabout way, without having concerned himself with mathematical natural science. He adopts the Aristotelian view of logically rigorous demonstrative science, but at the same time he withdraws its original metaphysical reference from it and, by transferring the metaphysical ideal of knowledge to non-metaphysical areas, he upgrades these latter ontologically. With other words: by adhering to Aristotelian logic and simultaneously separating this logic from metaphysics, he clears the way for the conviction that rigorous logic can also be applied to nature, that nature is structured logically. This conviction was constitutive for modern mathematical natural science, and Zabarella belongs therefore among its pioneers.

f. Cardano and Fracastoro: The New Primacy of Epistemology and the Epistemological Analysis of Metaphysical Concepts

³⁹⁶ *Op. cit.*, I, 5 = *Opera*, Col. 10 f. Zabarella vaguely writes "other sciences", although he knows that only one, namely metaphysics, remains. Further down he writes again that applied logic is no longer called logic, but natural philosophy or mathematics; metaphysics is again not mentioned.

³⁹⁷ *De Regressu*, IV = *Opera*, Col. 485.

The primacy of epistemology over metaphysics and ontology constitutes no discovery of Descartes or Kant, as we often read in handbooks of the history of philosophy, but is asserted in a more or less coherent manner already during the first phase of the modern struggle against metaphysics—in that phase, that is, which is characterized by the strong effect of fideistic and profane agnosticism. In discussing Zabarella's positions, we said wherein the inner connection between (metaphysical) agnosticism and the primacy of epistemology consists: since the *πρότερα φύσει*, i.e., the first ontological causes and principles, are forever beyond the human horizon of knowledge, our knowledge must orient itself by the perspective of the *πρότερον πρὸς ἡμᾶς*. Things cannot be seen otherwise than from the angle of human cognitive faculty, and therefore the nature of this latter has a shaping effect on our worldview. In the 16th century, epistemology as an independent philosophical discipline does not yet make great progress, i.e., the mechanisms of human knowledge are not yet investigated with the same persistence and thoroughness as in the 17th and especially in the 18th century; Fracastoro's example will nevertheless show us that the need for such an investigation was felt more and more strongly, and besides, its absence at that time changes not the slightest in the fact that, even before any deep analysis of the nature and formation of human knowledge, the view was presented that the limits of this knowledge would constitute the limits of our reality—we must even say that only the emergence and worldview-conditioned spread of this view gave epistemology (in the technical philosophical sense) its later boost.

Zabarella's factual confession to the primacy of epistemology in its connection with (metaphysical) agnosticism constitutes no insignificant exception in the 16th century. Similar positions had been formulated even earlier, specifically by representatives of fideistic as well as profane agnosticism. Thus Vives emphasized that we can never go beyond the limits of our cognitive faculty; even when we make ontological statements, we judge on the basis of the data of our mind and not of things, since our mind is the measure of things and not vice versa.³⁹⁸ Vives fields similar arguments against the defects of Aristotelian demonstration, which is supposed to proceed from the first, necessary causes. But on the basis of which criteria, asks Vives, do we want to define what is first and what is necessary? Must we orient ourselves here by the content of our mind or by the nature of things? And how could we identify ourselves with nature to such an extent that we would know with certainty what is first and necessary with regard to it?³⁹⁹ Significantly, a genuinely profane thinker like Nizolio also uses the same argument against Aristotelian *demonstratio*, giving it an ironic nuance as well. As humans that

³⁹⁸ *De prima philosophia*, I = *Opera*, III, 193 f. At this same place Vives nevertheless does not want to declare himself a disciple of Protagoras, and this suggests what originally stood in the way of an open and consistent acceptance of the primacy of epistemology: it was the fear of subjectivism and relativism.

³⁹⁹ *De causis corruptarum artium*, III, 3 = *Opera*, VI, 118 f.

we are, he writes, we can only converse with humans and not, for instance, with nature, to learn from it what is the First with regard to it.⁴⁰⁰ The alleged objectivity of the ontological frame of reference thus becomes indifferent, since it cannot be ascertained. Knowledge is a purely human affair, and indeed not only in the (self-evident) sense that the knowers are humans, but also in the sense that its limits coincide with the limits of human subjects of knowledge.

The new primacy of epistemology is grounded more extensively and programmatically by Cardano, in whom it also shows itself in its connection both with (metaphysical) agnosticism and with the principle *verum factum convertuntur*. For Cardano, Aristotle's wish to attain knowledge of the first causes and thus to make a god out of man is a mere outflow of empty vanity.⁴⁰¹ The arguments he cites against the Aristotelian ideal of omniscience make clear the whole extent of the change that took place through the elimination of traditional metaphysical questioning: the primacy of God and theology or of Being and ontology recedes before the primacy of man and anthropology—and this turn to anthropological questioning, which constitutes a decisive intellectual-historical phenomenon of the New Times already since its first phase,⁴⁰² hangs together in turn most closely with the new precedence of epistemology. Cardano's placing of man and anthropology in the foreground occurs, however, not through an open revolt against God, as often happened in the 18th and 19th centuries, but through the—at least outwardly modest—revival and heeding of the old moral maxim "know thyself." We know nothing if we do not know ourselves, and no expansion of our knowledge of the external world is possible if our own nature remains in the dark. That which is *πρότερον πρὸς ἡμᾶς* thus stands in the foreground here. Closest to us and at the same time most certain is, however, nothing other than our consciousness; even if we do not know how and why we came into the world, it remains certain that we are now here.⁴⁰³ In this way, the moral maxim transforms into a summons to the study of human consciousness with epistemological intent.

Cardano emphasizes subsequently that the science of consciousness differs radically from all others, specifically both regarding its object and regarding the degree of attainable certainty. Knowledge of the external world must end in conjectures and analogies, despite the assurances of those who think human knowledge could compete in all areas with the knowledge of higher spirits free from the fetters of the body.⁴⁰⁴ The human soul, which dwells in the body and sees the world through the mediation of the body, is unable to penetrate into the essence of things, but dwells on their surface and investigates with the help of the senses their dimensions,

⁴⁰⁰ *De veris principiis*, IV, 4 = I, 153.

⁴⁰¹ *De arcanis aeternitatis*, IV = *Opera*, X, 3 B.

⁴⁰² Detailed on this Kondylis, *Aufklärung*, 119 ff.

⁴⁰³ *De arcanis...*, IV = *Opera*, X, 3 B–4 A.

⁴⁰⁴ *A. a. O.*, 4 B u. 4 B.

similarities, and modes of behavior. Here the gap between soul or consciousness and object of knowledge remains unbridgeable. Exactly the opposite is the case with the science of consciousness (*scientia mentis*): it identifies itself with its object and even creates it, which is why it can also know it completely. As we see, Cardano detaches the principle *verum factum convertuntur* from its initial area of application established by the Humanists and uses it,⁴⁰⁵ as far as I can see, as the first to ground the primacy of epistemology and thus give the general anti-metaphysical sense of this principle a specific direction.⁴⁰⁶ Not physics, but only mathematics belongs to the same class as the science of consciousness, for it likewise creates its own object of knowledge: as a creation of geometry, the perfect triangle can be completely known.⁴⁰⁷ Although Cardano considers the application of mathematics to physics impossible and therefore represents an early phase of the anti-metaphysical struggle of modern rationalism, on the other hand the bridge he builds between mathematics and science of consciousness or epistemology seems to pave the way for Descartes and Galilei.

In contrast to Cardano, Fracastoro regards physics as the most important science; mathematics seems to him insignificant because of its object, although it possesses the highest degree of certainty, while conversely theology or First Philosophy, which deals with the highest, can grant no certainty.⁴⁰⁸ From this agnostic standpoint, Fracastoro expresses his contempt for those uncultivated minds who seek the most general and at the same time most remote causes of things, and he sees in the willful restriction to the investigation of the natural causes nearest and accessible to us a sign of genuine philosophical ethos.⁴⁰⁹ This investigation is to rest, in turn, on an inductive method oriented by dialectical and rhetorical models:⁴¹⁰ this shows once again how important the transfer of methods, which both according to Aristotelian and humanist understanding had to do with the ethical and political sphere, to the field of physics was for the formation of modern natural-scientific methodology. With regard to the question that interests us here, it must be noted that the application of induction to the question of knowledge leads almost automatically to the construction of a genetic epistemology, within which the stages of knowledge appear as phases of a developmental process, whereby the higher arises from the lower without gaps and leaps. The formation of a genetic epistemology had an important consequence for metaphysics: metaphysical concepts, and not least universals, appeared now as

⁴⁰⁵ See above Sect. 2 b.

⁴⁰⁶ This important aspect is overlooked by Mondolfo (*Il 'verum-factum' prima di Vico*, on Cardano esp. 40 f.), who also otherwise proceeds rather undifferentiatedly and does not grasp the worldview implications of the positions he refers to.

⁴⁰⁷ *De arcanis...*, IV = *Opera*, X, 4 B.

⁴⁰⁸ *Turrius sive de intellectione dialogus*, I = *Opera*, 165 AB.

⁴⁰⁹ *De sympathia et antipathia*, epistola dedicatoria = *Opera*, 78 B.

⁴¹⁰ *Turrius*, II = *Opera*, 179 C–185 C.

creations of the human mind, which moreover rooted in its deeper or lower layers. In this way, metaphysical conceptualization moves into a new light, not exactly flattering: it no longer forms the fine mental crystallization of Being, but a human construction consisting of heterogeneous, perhaps badly used materials. Epistemology has thus not only eliminated metaphysics directly by disputing its highest place within the philosophical disciplines, but also undermined it indirectly by analyzing the mechanisms of the origin of metaphysical conceptualization and relativizing its claim to objective validity; similar things had been achieved earlier by the linguistic analysis of this same conceptualization. The organic—and until today little researched—relationship between the emergence of genetic epistemology and the downfall of metaphysics shows itself, of course, in its full extent only with and after Locke. Precisely the later development makes the early phenomena we describe here so remarkable.

Fracastoro depicts the origin of universals by ordering them into the whole developmental process of knowledge, specifically at a stage that stands below that of the pure intellect, so that the existence of such [a pure intellect] is indirectly called into question. Every knowledge, writes the Italian physician and philosopher, comes about through *simulacra* or *spectra*, which are emitted by objects and have a modifying effect on the soul. The thought (*intellectio*) is precisely the representation of the object in the soul as it takes shape through the reception of the *simulacrum*. In this reception, the soul is passive, but it comes out of this passivity even before it has reached the higher stage of logical operations. At an intermediate stage, it unfolds an instinctive movement, the received images dissolve into their components, and generalizations form on the basis of the grouping of similar elements from different received objects. In these generalizations, in other words, several similar elements group around a certain element that serves as the starting point and at the same time as the guide of the movement of the soul, without an order arising from this from the beginning. This embryonic form of knowledge is called *subnotio*, and it represents no mental synthesis or syllogism by which truth and falsehood are to be distinguished, but a simple sequence of representations of perceptible objects. This movement of the soul is therefore neither pure thought nor pure sense (although it starts simultaneously with the activation of the senses), and just as little is it identical with memory, which is presupposed temporally and logically.⁴¹¹ Fracastoro seems here to anticipate Hobbes' and Hartley's association doctrine, specifically in the attempt to build that bridge between memory and the higher mental functions which Aristotelian epistemology lacked because of its more descriptive and classificatory than genetic character.

Universals root now in such associative *subnotiones*. The idea of white, e.g., as it is thought independently of its connection with a specific object, forms as the result of the associative

⁴¹¹ *Op. cit.*, I = *Opera*, 169 D–170 A.

comparison of objects of the same color. Milk, snow, etc. find themselves together in the soul by virtue of the associative activity of this latter; thus their common element can be determined by their direct comparison with one another, which is then found in the same way in other objects until it finally makes itself independent of all. Through the same procedure, genera arise from species, etc. What used to be the hierarchy of beings or essences thus becomes the gradation of the ascending development of human cognitive faculties. Fracastoro says explicitly that the *universalium* is our own creation and constitutes an element of our soul, which can participate in new mental combinations at any time.⁴¹² Since it forms in processes that root in the senses but simultaneously overcome them, Fracastoro must pose the question whether senses and intellect differ radically from one another—and he answers it in the negative. Senses and intellect, he opines, grasp the same thing, only in different ways respectively; universals grant the intellect greater clarity, to be sure, but the universal in them is to be understood only as a comprehensive representation and not *secundum esse*.⁴¹³

⁴¹² *Op. cit.*, 177 AB (*a nobis fit*).

⁴¹³ *Op. cit.*, 177 C.

II. Modern Natural Science and the Fate of Metaphysics in the 17th Century

1. General Remark

The emergence of mathematical natural science in the 17th century was undoubtedly the hardest blow that had been dealt to metaphysics in its long history, if we perhaps disregard the rise of the sciences of man and of society in the 18th and especially in the 19th century. Since the primacy of metaphysics in the traditional view meant precisely that the other sciences, and not least mathematics and physics, were its humble handmaidens, it is obvious what the independence of physics in its new alliance with mathematics implied for the time-honored rule of metaphysics. The term "metaphysics" was inevitably connected with the more or less clear conception that beyond, behind, or above the world which constitutes the object of physics, there exists a perfect reality, in comparison to which both the object of physics and physics as a science are incurably imperfect; the conviction that empirical nature is mutable, unstable, and incapable of rational grasp, in short ontologically inferior, represented the elementary tenet of ancient-Christian metaphysics. Mathematical natural science has ruined precisely this conviction and the ontological hierarchy connected with it. The possibility of an application of mathematics to the study of natural phenomena meant in itself that nature is logically structured and can therefore be grasped rationally; thus, a completely different sphere of activity opened up to the rationally proceeding intellect than the one intended for it on the basis of the traditional arrangement of ontological levels.⁴¹⁴ Like the specific demand for the application of mathematics to physics, the general ideal of a rigorous scientific method as *ars inveniendi* also presupposed the belief in the inner logic of nature; the method is therefore not an autonomous discovery in the autonomous field of logic and theory of science, but it springs, initially as a demand, from a concrete worldview attitude. The ideal of an absolutely certain method and, parallel to it, the view that rational graspability does not constitute a privilege of the sphere of the transcendent spirit due to its special ontological nature, enable and consolidate the primacy of the *certitudo modi procedendi* over the *certitudo obiecti*. A development that had begun more than two centuries earlier in another field⁴¹⁵ thus reaches its imposing conclusion.

Mathematical natural science did not abolish the separation between the Beyond and the Here and Now. The world-machine required a maker and a first cause of its motion, although the prime mover no longer meant the same thing as it did for Aristotle and Thomas (i.e., the cause of an uninterrupted transmission of motion to a series of touching moving bodies), but rather the cause of a single momentary impulse, which subsequently transformed itself of its own accord into self-perpetuating motion. The relationship of the transcendent being or principle to the world was thereby loosened considerably, and at the same time it was drastically simplified. But that was not all. Although the dualism of transcendence and immanence, God and world,

⁴¹⁴ Cf. Kondylis, *Aufklärung*, 88 ff., 421 ff.

⁴¹⁵ See above Ch. I, Sect. 2 b.

remained, within the latter all those gradations were eliminated that represented a consequence and a reflection of the old metaphysical hierarchy; the unification of the world thus, in the long run, also prepared the abolition of the dualism of God and world. Mathematical natural science eliminated the Aristotelian separation between the immovable and imperishable celestial sphere and the sublunary region, in which motion and decay prevail; the new worldview was uniform, meaning a single constant lawfulness prevailed in it, which applied equally to celestial and terrestrial phenomena and allowed for no distinction with metaphysical premises or implications. The unification of the worldview by means of the concept of natural law now finds its correspondence in the unification of knowledge under the aegis of certain principles that apply to the entire spectrum of being. While according to the traditional metaphysical view there was an essential and substantial difference between the firm and complete knowledge of the immutable transcendent spirit and the approximate knowledge of the unstable and incalculable natural world, mathematical natural science eliminates the qualitative difference of the various forms of knowledge by means of the universally applicable scientific method—at least to the extent that these rely on the work or cooperation of experience and thought or calculation; revealed knowledge is generally not openly questioned, but its practical relevance becomes increasingly smaller. The ideal of metaphysics as rational knowledge collapses from the moment in which (complete) rational knowledge can relate (also) to non-metaphysical objects.

Since rational knowledge, on the basis of the view of the uniform, lawfully ordered world, forms a closed whole, the agnosticism to which the (mathematically oriented) physicists and the innovative philosophers of the 17th century often appealed could not be all-encompassing and consistent, but had as its target only the traditional questioning of metaphysics, namely the questions regarding the being as being and regarding substance. The uniform worldview and the immutable lawfulness obeyed by its constituents place the concepts of relation and function in the foreground, whereby being and substance are displaced. It is now no longer of interest what something *is* as a being, but *how* something functions in its relations to the remaining constituents of a functional system; the summation of the mode of function of certain interdependent factors in a mathematical formula constitutes precisely the content of a natural law. The shift of interest from substance to function brings about a true worldview revolution. The traditional view started from the distinction between substantial and accidental properties of a thing, and subsequently defined the same on the basis of the former and ordered it into a certain level of the ontological hierarchy. This hierarchy is now dissolved to the extent that the classic distinction between substance and accident slackens or drops away. Everything that can be ascertained about a thing is regarded as an initially equal constituent or aspect of it alongside others, since everything can play a role within the functional system to which the thing belongs. The consideration of the thing from the standpoint of function thus radically changes its

concept: whereas it formerly rested on a substance as the carrier of accidents or attributes, it now factually becomes the sum of these latter.⁴¹⁶ Concepts that depicted the substance and its states are replaced by others that relate to the concrete mutual relation of the constituents of a functional system; if in the mathematical-scientific context there is talk of substance as the invisible carrier of perceptible qualities, this does not mean the substance as the general and permanent character of the thing, but rather the field of the pure validity of mathematical relations beyond the distorting effect of sensory accidental factors.⁴¹⁷

This shows that, although in the 17th century the question of substance is at the center of philosophical investigations and debates, one can nevertheless not speak of a continuation of traditional metaphysical questioning that would sovereignly bypass the new mathematical natural science. The opposite is the case: the question of substance remains in the foreground only in the new form which it received through mathematical natural science, despite the persistence and processing of classical philosophical-metaphysical motifs. The scientific division of the properties of bodies into primary and secondary brought to life a scheme that looked similar to the distinction between substance and accidents, although, as said, the substance was now conceived more as a field of application of pure mathematical relations than as a link in an ontological chain; in this way, at any rate, the old question of the being as being was pushed aside despite the persistence of the question of substance, and precisely because this question changed substantially in order to be able to survive. Significant for the turn brought about by the impressive appearance of mathematical natural science is the much stronger interest in the spatiotemporal determinations of substance; what is strived for now is the satisfactory analysis of the interlacing of substance with its determinations rather than its isolation from the latter through abstraction. This does not mean, of course, that the spatiotemporal determinations and the substance are always conceived in a sensualist or materialist way—nothing less than that: in the most frequent and representative cases, spirit and matter are understood as separate autonomous substances, and a main concern of the philosophy of the 17th century is directed toward the clarification of their relationships to one another. Here, however, it is not a matter of a simple continuation of traditional metaphysical problematics, but of the attempt to find an answer to the questions that mathematical natural science posed directly and indirectly, or at least to take its results into account. The stark dualism of the two substances, which drastically simplified the ontological realm, hangs together in turn with the dualism or, if one will, the bipolar unity of God and world, as this was suggested by the mechanistic worldview, while the strong desire to regulate the relationships between spirit and matter as satisfactorily as possible sprang from the worry that the ontological upgrading of the material world on the basis of the assumption that it is lawfully structured and capable of rational grasp prepared for the fate of

⁴¹⁶ Rombach, *Substanz*, I, 12 ff., 341–343.

⁴¹⁷ Cassirer, *Substanzbegriff*, 218, 216; cf. Kaulbach, *Einleitung*, 120.

the former. The endeavor for a clarification or settlement of the relationships between spirit and matter thus generally aims to guarantee the integrity of the former within the framework of orthodox or modernized Christian apologetics.

The determining influence of the mathematical natural science of the 17th century on the fate of metaphysics is not limited to the reformulation of the question of substance, but extends to three other neuralgic points that must be mentioned here. To that influence goes back, first of all, the demand to transform metaphysics into a general epistemology. This demand is indeed a genuine product of the 17th century, yet it could rely on one of the Aristotelian interpretations of the concept of metaphysics, i.e., on the definition of metaphysics as the science of first principles. These first principles, however, are no longer of an ontological character, but constitute pure principles of thought and apply equally to all areas of the knowable, which now become ontologically homogeneous. The epistemological character of this metaphysics becomes visible in its increasing interlacing with mathematics, whereby it takes on axiomatic form. Precisely the belief in the reducibility of all areas of the knowable to a few axioms also begets the idea of the philosophical system in the strictly mathematical sense of the word. Scholastic philosophy certainly knew the idea of the system as a logically coherent whole, but this idea was grounded in the assumption of the objective existence of a hierarchy of beings, while the idea of the system that forms under the influence of the mathematical-scientific model found its realization in an internally homogeneous cognitive whole resting on a few simple principles, which was structurally very similar to nature interpreted mechanistically and governed likewise by a few simple and universally valid laws. The second point is that the content itself of the metaphysical questions that continue to be posed is determined by the research objects or results of mathematical natural science, or at least makes reference to them. Apart from the question of substance, the problems of space and time, of causality, of the relationship between spirit and matter etc. increasingly acquire a mathematical-scientific character.⁴¹⁸ The interlacing of mathematical-scientific and metaphysical problematics is reinforced by the fact that some representatives of mathematical natural science are not content to combat traditional metaphysics openly or covertly, but for their part design a mechanistic-materialistic metaphysics that makes general statements about the essence of matter, of bodies, of natural laws etc. beyond the distinction between primary and secondary properties.⁴¹⁹ Thirdly, the interlacing of mathematical natural science and metaphysics leads to a determination of the

⁴¹⁸ Therefore, an expert on the subject can hold the opinion that a study of 17th-century metaphysics is possible based on purely immanent criteria, see Leyden, *Seventeenth-Century Metaphysics*, XV. This opinion must be regarded as one-sided if we recall the Christian-apologetic attitude of many representatives of the metaphysics of that time, which often influences their treatment of natural-scientific questions.

⁴¹⁹ On this type of metaphysics cf. Faggiotto, *Il Problema*, 18 f.

character of the Beyond or of God on the basis of the determination of the Here and Now in the light of the results of mathematical natural science. If the world is conceived as a machine, then God must be a mechanic; if the universe is compared to a harmonious building, then God appears as a brilliant architect, etc. In any case, in every determination of the divine essence, one starts from the nature of the world and not the other way around. This practically means a curtailment of the omnipotence of God, who may indeed still create the world, but under the condition that he obeys the laws discovered and formulated by mathematical natural science, even if these laws are subsequently designated as works or at least as forms of unfolding of divine activity. If God continues to appear to rule, the extent and character of his rule are nevertheless determined by mathematical natural science, thus by the nature of nature. This tendency intensifies in the Age of Enlightenment and its factual consequence is the subjection of the Beyond to the Here and Now.⁴²⁰ One need not explicitly explain what this had to mean for metaphysics.

Mathematical natural science had an anti-metaphysical effect not merely as science in the new, anti-Aristotelian sense of the word, but also and above all as a fundamental worldview attitude that adopted the anti-metaphysical positions and arguments that had appeared in the womb of the humanist movement since the early Renaissance, modified them, reoriented them, and used them for its own purposes.⁴²¹ These positions and arguments were put forward by the Humanists with the intention of justifying their preference for the socio-historical world over metaphysics and physics; mathematical natural science, however, applied them to the realm of relationships between man and nature, and thus changes them at the very moment in which it professes them. We have already spoken of the reinterpretation of the thesis of the priority of the *certitudo modi procedendi* over the *certitudo obiecti* as soon as this thesis placed itself in the service of mathematical natural science. Something similar happened with the principle *verum factum convertuntur*, which the Humanists understood to mean that man can only know social phenomena, since only these, not natural phenomena, are his own works. The later transfer of this principle to nature has to do directly with the ontological upgrading of the latter known to us, as this articulates itself in the view that nature is rationally structured and therefore accessible to a purely rational grasp. Rationally structured nature constitutes a machine, and therefore it can be manufactured by man just like any other machine, if only he possesses the materials required for it as well as the means to move the same within the vast spaces of the universe. In any case, mathematical natural science regards itself as a reconstruction of the universe, even if only on paper. Nature can thus be grasped rationally because it could also

⁴²⁰ On this determination of the idea of God by the results of the natural sciences see Kondylis, *Aufklärung*, 361 ff.

⁴²¹ This thesis turns against researchers like, e.g., Randall, who fail to recognize the worldview presuppositions of mathematical natural science.

have been the product of human art. Here it shows that and how the application of the principle *verum factum convertuntur* to nature runs counter to Aristotelian priorities, according to which art could only be an imperfect attempt at imitation of nature.⁴²²

The new superiority of art over nature or the reversal of their traditional relationship to one another expresses a new consciousness of the practical possibilities of man, which resists more or less the subjection of the Here and Now to the Beyond. This consciousness now articulates itself in the transfer of another fundamental humanist thesis, namely the primacy of the *vita activa*, from social life to the realm of man's relationships to nature. Here, however, we must remember that the possibilities of a complete domination of nature through the will and striving of Promethean man had already been praised in high tones in humanist literature. Thus for Manetti, for example, the sole task of man consists in ruling over everything that exists on earth through his action and thought.⁴²³ But Ficino also emphasizes that man is no servant, but a rival of nature and capable of building the same from the beginning through the power of his intellect, if only he possessed the suitable materials and instruments for it.⁴²⁴ As long as such views were put forward by authors like Ficino, who were metaphysically oriented and continued to advocate the primacy of the speculative life, they remained, to be sure, abstract and rhetorical, although they naturally exerted a broad influence. They attained a more concrete content, however, when they openly combined with a radical revision of that contemptuous attitude toward manual labor and the mechanical arts which in Plato and Aristotle went hand in hand with the primacy of the speculative life and of metaphysics as actual science and wisdom. This inner connection between the new evaluation of work and technology and the fate of metaphysics as the highest form of theory must be particularly emphasized. Here too, of course, the development becomes apparent long before the rise of mathematical natural science, since the workshop of the Renaissance artist already becomes the site of manifold technical activity,⁴²⁵ while among the representatives of 16th-century Italian natural philosophy Bruno, who sees in man's technical skills the guarantee of his dominion over nature and simultaneously denies the separation of theory and practice,⁴²⁶ considers manual productive work the material prerequisite of every theoretical occupation.⁴²⁷ In more systematic form, the Aristotelian contempt for manual labor is rejected by people who deal directly with the new empirical science and with the new technology; the same people set up the demand for a simple and direct language⁴²⁸ (the contradictory nature of the whole development shows in the fact that the

⁴²² Rossi, *Filosofi*, 139 ff.

⁴²³ *De dignitate et excellentia hominis*, III, 45 = p. 91.

⁴²⁴ *Theologia Platonica*, XIII, 3 = II, 223 f.

⁴²⁵ Rossi, *Filosofi*, 27 ff.

⁴²⁶ *Spaccio*, III = *Opere*, II, 152.

⁴²⁷ *Eroici furori*, II, 2 = *Opere*, II, 464.

⁴²⁸ Rossi, *Filosofi*, 17 f., 54, 59, 61, 63, 76.

Humanists had also raised this same demand with equal emphasis). The final worldview legitimization of work and technology occurred, however, only when mathematical natural science opened up an inexhaustible sphere of activity to the *vita activa* and its protagonist, the *homo faber*.⁴²⁹ Work and technology no longer develop tentatively and accidentally, but on the basis of the solution of theoretical questions and for their part pose new ones.⁴³⁰ This paves a way for thought that was unknown and unimaginable for traditional metaphysics. The belief in the rational structuring of nature, the *vita activa* as a struggle for its domination, and the new conception of work and technology combine with one another and form a dense worldview mesh that drives a new type of human to devote himself with all his heart to the charms and dangers of the Here and Now.

⁴²⁹ Arendt, *Human Condition*, 262 ff.

⁴³⁰ Zilsel, *Die sozialen Ursprünge*, esp. 119 ff.

2. The Problem of Agnosticism in the 17th Century

The agnostic basic thesis of the limits of human reason and knowledge is used in the 17th century just as extensively and intensively as in the three preceding ones as a central anti-metaphysical argument. The systematic development of mathematical natural science, however, also influenced the use of agnostic arguments. In the 15th and 16th centuries, the agnostics or skeptics denied not only the rational knowledge of metaphysical truths, but also the possibility of reliable knowledge of nature—this questioning of physics was admittedly directed *in concreto* against scholastic-Aristotelian physics and therefore fulfilled a driving rather than an inhibiting function, quite apart from the fact that the close connection of physics and metaphysics in the thought system of Aristotelianism made the rejection of the former appear as a natural consequence of the renunciation of the latter. The new (mathematical or at least anti-Aristotelian) physics takes leave of the search for substances and causes (in the Aristotelian sense), it detaches itself from metaphysical conceptualization, and thus it can no longer attract the polemic of the enemies of Aristotelianism, although many skeptics (or "Pyrrhonists," as they were generally called in the 16th century) continued to dispute the reliability of any knowledge, including scientific knowledge. It is obvious that the new natural science could not take root and grow without believing in the possibility of a reliable knowledge of its object and without regarding engagement with the Here and Now as the only serious sphere of activity for rational thought. Accordingly, the pioneers of the new physics adopt a double attitude toward the agnosticism or skepticism handed down from the 16th century: they admit that the human intellect cannot grasp the innermost essence of things and that therefore metaphysics must fail as rational knowledge, but on the other hand they assert the possibility of reliable knowledge of natural phenomena—admittedly under the conditions of a correct application of the suitable method and an appropriate evaluation of empirical and experimental data. The thesis that knowledge is attainable as knowledge of phenomena, relations, and functions, but not as knowledge of substances and ultimate causes, thus implies both the partial acceptance and the partial rejection of "Pyrrhonism." We must note, however, that those representatives of the new physics who are mathematically oriented and place special value on the distinction between primary and secondary properties often seem to share the Pyrrhonian view of the deceptiveness of the senses, whereby the level on which knowledge of nature becomes possible is set beyond the senses. In this case, the term "phenomenon" does not mean the perceptible data, but rather it is contrasted with the scholastic-Aristotelian concept of substance with polemical intent.

In Gassendi's example, the ambivalent relationship of the representatives of new physics to agnosticism or skepticism can be established particularly vividly, for here we are dealing with someone who is not only familiar with the work of prominent skeptics of antiquity and of the

16th century,⁴³¹ but also maintains close personal contact with the circle of his Pyrrhonist compatriots, who continued to display indifference toward the new physics and denied any certainty of knowledge regardless of the source and method of knowledge.⁴³² Gassendi finds in the arguments of those who point to the "nullity and obscurity of human knowledge" the best antidote against peripatetic philosophy; the Pyrrhonian doctrine of acatalepsy had revealed to him the whole vanity of the dogmatists.⁴³³ Nevertheless, Gassendi is far from accepting the doctrine of acatalepsy fully and completely. Against high-flying metaphysical syllogistics, he asserts observation and experience as the two guarantors of a certain, albeit modest knowledge,⁴³⁴ and he programmatically defends the possibility of an empirical-experimental science that deals not with substances but with phenomena (*scientia experimentalis et apparentialis*). There are many knowable things, he writes, even if not those meant by Aristotelian science.⁴³⁵ A paradox in Gassendi's position, of which he is evidently not aware, consists in the fact that for the refutation of Aristotelian science he falls back on arguments that the Pyrrhonists used against *every* form of science and certainty.⁴³⁶ The contradiction becomes striking when Gassendi, who is close to empiricism, adopts the Pyrrhonian argumentation about the unreliability of the senses—in order to combat the Aristotelian version of empiricism.⁴³⁷

Even before Gassendi, Bacon had represented the double attitude of the pioneers of new physics toward agnosticism or skepticism in an almost identical way. Also with him, the observation of the necessity of overcoming Pyrrhonism in the name of scientific certainty (in the new sense) goes hand in hand with a utilization of its doctrines with anti-metaphysical intent. As Bacon believes, his starting point practically coincides with that of the adherents of the doctrine of acatalepsy, but the end of his path is a completely different one, for he admits the possibility of the knowledge of many things of nature, specifically as the result of the constructive

⁴³¹ Gassendi himself emphasizes his intellectual debt to Cicero, Montaigne, and Charron as well as Humanists like Vives and Ramus, see *Exercitationes paradoxicae adversus Aristoteleos*, I = *Opera*, III, 99; cf. his letter to Du Faur de Pibrac (1621), *Opera*, VI, 1 B–2 A. In his struggle against metaphysics, he also uses arguments of fideistic agnosticism, cf. Schmitt, *Gianfrancesco Pico*, 175 ff. His real concern, however, is not the strengthening of faith, but the elimination of metaphysics in order to clear the way for useful and possible knowledge, see Gregory, *Polemica*, 141.

⁴³² The views of the circle of Pyrrhonists around La Mothe Le Vayer and Gassendi's relationships to it are described by Pintard in his work on *Le libertinage érudit*. Cf. Popkin, *History*, 89 f.

⁴³³ *Exercitationes*, I = *Opera*, III, 99 f.

⁴³⁴ *Op. cit.*, 107 B–108 A.

⁴³⁵ *Op. cit.*, II = *Opera*, III, 207 AB.

⁴³⁶ *Op. cit.*, 207 B–208 A.

⁴³⁷ *Op. cit.*, 192 B ff. Gassendi sees himself forced to give up the extreme skeptical positions when he passes from the polemic against Aristotelianism to the positive exposition of his own theses, see Pintard, *Libertinage*, 493 f., 501 f.

cooperation of intellect and senses.⁴³⁸ Bacon knows himself to be entirely of one mind with the skeptics in that a perfect knowledge of being is excluded for man from the outset and that he who seeks it must be stupid or reckless.⁴³⁹ He is, of course, clear about the fact that a consistent plea for agnosticism presupposes at least a partial approval of the Pyrrhonian reservations against the reliability of the senses and of the human cognitive faculty in general; according to his famous saying, the human mind is no clear and uniform glass that faithfully reflects the rays from things, but rather resembles an enchanted glass, full of deception and superstition.⁴⁴⁰ As an empiricist, Bacon thus seems to face the same difficulty as Gassendi. Physicists who are not (one-sidedly) empiricistically but mathematically oriented and share the described double attitude toward agnosticism or skepticism are confronted with the reverse difficulty. Thus Galilei also does not believe that the human intellect can grasp earthly or celestial substances.⁴⁴¹ At the same time, however, he thinks that the senses, which are indeed often unreliable, can be corrected by the work of reason,⁴⁴² and he even goes so far as to assert that human, specifically mathematical, knowledge differs from the divine regarding its extent and character (namely, it is discursive, the divine intuitive), but not regarding its intensity and clarity.⁴⁴³ Agnosticism and skepticism are rejected here so emphatically that it is difficult to see why Galilei considers the knowledge of the substance of things impossible, especially since he reduces this substance to mathematical structures.⁴⁴⁴ The only explanation for this is that his agnosticism is polemical; he turns, that is, exclusively against the scholastic-Aristotelian metaphysical conception of substance, of its knowledge, and of knowledge in general.

We know that the emergence of a programmatic profane skepticism already in the 16th century raised serious doubts in conservative circles about the expediency of the alliance between skepticism and fideism, which for centuries had scandalized no believer. In the 17th century, too, the immanent ambiguity of skepticism or agnosticism was strongly felt, especially by clergymen who, out of fear of the spread of these currents in their profane version, now condemned thinkers like Montaigne or Charron, whose skepticism was originally welcomed by many as at least a potential ally of fideism.⁴⁴⁵ Jesuits like Garasse and Bagot defended against the Pyrrhonists the Aristotelian view that our senses are reliable and that on the basis of sensory

⁴³⁸ *Novum Organum*, I, 37 = *Works*, I, 162 f.

⁴³⁹ *Scala Intellectus sive Filum Labyrinthi* = *Works*, II, 687.

⁴⁴⁰ *Advancement of Learning*, II = *Works*, III, 394 f. Based on the justification of this thesis, Bacon's theory of idols emerges.

⁴⁴¹ *Macchie solari*, III = *Opere*, V, 187 f.

⁴⁴² *Dialogo sopra i due massimi sistemi del mondo*, II = *Opere* VII, 128 f.

⁴⁴³ *Op. cit.*, I = *Opere*, VII, 128 f.

⁴⁴⁴ *Saggiatore*, 6, 48 = *Opere*, VI, 232, 350, 347.

⁴⁴⁵ On the ambivalent intertwining of fideism and skepticism from its Augustinian beginnings to Pascal s. Bredvold, *Intellectual Milieu*, 16 ff.

data and through the correct use of reason we can arrive at firm metaphysical truths. The Jansenists, continuers of the Augustinian tradition, naturally rejected such positions and held fast to the alliance of fideism and agnosticism; but the Thomists, too, often saw themselves forced to remind of the limits of human reason, and not only in the fight against profane rationalism, but also against the Protestant claim to determine the content of Scripture and religion on the basis of the dictates of the conscience or reason of the individual.⁴⁴⁶ To the extent that Protestantism was regarded from this point of view as a fellow traveler of rationalism, Catholics professed fideistic positions; but such positions were also represented by Protestants of various colors when it was necessary to take the field against the Catholic-Thomistic mixture of theology and philosophy or metaphysics. In England a development became noticeable that had important consequences for the future engagement with the problem of metaphysics, especially in its connection with the new natural science. In this country, too, fideistic arguments were put forward from both the Catholic and the Calvinist-Puritan side.⁴⁴⁷ The solution found here for the problem of the relationships between state and church favored the rise of a tendency within Anglicanism that opposed the Catholic as well as the Calvinist abandonment of reason. The most significant representatives of this tendency, Chillingworth and Tillotson, now try to find a middle path. They admit that for the finite human intellect there can be no absolute and final certainty, at the same time, however, they consider (consistent) skepticism disastrous, and they come to the view that there are different levels of certainty and on each of them a different kind of testimony and proof would apply; a concrete empirical treatment of every single case and caution with generalizations were therefore advisable.

This view was soon transferred from the religious-theological to the scientific-theoretical and philosophical field, and specifically at a critical moment for the formation of natural science as a discipline with philosophical premises and consequences. Moderate agnosticism is first propagated by Wilkins, the actual founder of the Royal Society, and Glanvill; it is adopted by Boyle and Newton and finds wide dissemination in various modifications in the Age of Enlightenment. It can be summarized as follows: science cannot know substances and causes in the Aristotelian sense, but only appearances; nevertheless, radical doubt, which permits no science, must be rejected just as much as dogmatism; knowledge becomes empty of content and meaning if it attempts to exceed its immanent limits, but within these limits it has meaning and offers sufficient certainty.⁴⁴⁸ In particular, Glanvill accompanies the formulation of the new scientific-theoretical program with a vehement polemic against scholastic-Aristotelian

⁴⁴⁶ Popkin, *History*, 113 ff., 67 ff.

⁴⁴⁷ Bredvold, *Intellectual Milieu*, 73 ff.; cf. (also regarding the following) Allen, *Doubt's Boundless Sea*, 117 ff.

⁴⁴⁸ Van Leeuwen (*Problem of Certainty*) describes in detail the dissemination of this view in the authoritative scientific circles of England in the 17th century as well as its original formation within the framework of theological debates.

metaphysical dogmatism, in the context of which the usual reproaches regarding empty verbiage, unclear conceptualization etc. are repeated and the constant battles of the parties against one another are attributed to the spirit of dogmatic intolerance.⁴⁴⁹ For understandable reasons, Glanvill places special value on the critique of Aristotelian physics,⁴⁵⁰ and conversely he praises the recent rise of the mathematical sciences and the mechanical arts, which he attributes to the weak influence of Aristotelian authority on these areas.⁴⁵¹ The connection of Glanvill's anti-metaphysical attitude with the rise of science and technology shows itself also in the fact that he reckons the inability to make new useful inventions among the essential defects of Aristotelianism.⁴⁵² The skepticism that Glanvill opposes to metaphysical dogmatism thus forms no new version of Pyrrhonian acatalepsy, but the expression of a dynamic profane attitude. Precisely for this reason, not only the dogmatic pseudo-omniscience of the Scholastics is rejected, but also their theological doctrine of the innate mental weakness of sinful man—a doctrine that, as Glanvill remarks, in reality justifies (unfruitful) skepticism.⁴⁵³ Since scholastic-Aristotelian metaphysics moves between these two extremes, it leaves no other paths open than the alleged omniscience of *scientia* and total ignorance.⁴⁵⁴ Incapable of truly knowing the ultimate causes and the substance of things, metaphysicians must make imaginative statements about them. It is correct, however, to be content with what we can really know, and not to despise the really knowable in the name of what lies beyond our powers anyway.⁴⁵⁵ Total skepticism (whether of fideistic or profane-Pyrrhonian provenance) thus appears as the reverse side and the fatal consequence of dogmatism, which, by preaching fictitious truths, shakes faith in truth altogether. Glanvill's skepticism therefore means nothing other than the radical detachment from metaphysical dogmatism, which stands at the beginning of a modest experimental natural science oriented toward the possibilities and needs of the Here and Now.⁴⁵⁶

Glanvill thought that he could limit this skepticism of his to the field of philosophy without drawing anti-religious conclusions from it.⁴⁵⁷ On the other hand, however, he did not want to fall prey to fideism, for he was convinced that the investigation of nature would offer arguments

⁴⁴⁹ *Vanity of Dogmatizing*, esp. 150 ff., 224 ff.

⁴⁵⁰ *Op. cit.*, 169 ff.

⁴⁵¹ *Op. cit.*, 139 f.

⁴⁵² *Op. cit.*, 178.

⁴⁵³ *Op. cit.*, 15.

⁴⁵⁴ *Op. cit.*, 213.

⁴⁵⁵ *Op. cit.*, 237.

⁴⁵⁶ Cf. the analysis by Wiley, *Subtle Knot*, 213 ff.

⁴⁵⁷ *Vanity of Dogmatizing*, 186.

for the underpinning of religious faith.⁴⁵⁸ The attempt at a rational justification of faith should, however, not exceed certain limits if one did not want to return to the scholastic-Aristotelian mixture of theology and metaphysics.⁴⁵⁹ Of an absolute knowledge of the essence of things there could in any case no longer be any question. Significant for the turn of things after the ontological upgrading of nature by the new physics is the fact that this agnosticism now served not only as a weapon against dogmatic metaphysics, but also against the just-emerging materialist tendencies, which is why it appeared doubly precious to those who wanted to reconcile their scientific interests with a modernized form of religiosity. Thus Boyle tried to put a stop to the materialist inclinations of contemporary researchers by reminding them of an anti-metaphysical axiom of new physics, namely that one cannot know the causes and the essence of things, but only the mode of origin of appearances.⁴⁶⁰ Boyle did not fail, of course, to muster his agnosticism also against traditional metaphysics, by asserting that, if scientific knowledge was not easy to obtain, the knowledge of spirits and suprasensory things in general must encounter insurmountable difficulties.⁴⁶¹ Denounced are all who want to understand things that are neither perceptible nor explainable by mechanical causes. To these belong those who occupy themselves with the metaphysical justification of theological dogmas, as well as the originators of non-religious metaphysical constructs who assume a gap between immutable and perishable beings and then summon all conceivable paradoxes to bridge this gap.⁴⁶²

Boyle uses the term "metaphysics" in a new sense, specifically understanding by it the first, universal axioms that are applicable to every object and area. Such "first metaphysical and mathematical truths" are the following, for example: two statements contradictory in content cannot be true at the same time, the whole is greater than each of its parts etc. etc. Axioms such as these apply always and everywhere, no matter what else changes in the fields of philosophy or theology, and they form the foundations and instruments of all human knowledge; they are also not touched by the content of revealed religion.⁴⁶³ The reinterpretation of the concept of metaphysics, which is undertaken here with regard to the epistemological needs of the new mathematical natural science, shows that the threshold to a new era had already been crossed. Boyle is nevertheless not the originator of this reinterpretation, just as Glanvill was not the first

⁴⁵⁸ *Op. cit.*, 245 ff. In 1670 Glanvill publicly turned against Puritan fideism because he feared that Augustinian theology would ultimately promote profane, potentially atheistic skepticism, see Bredvold, *Intellectual Milieu*, 89 ff.

⁴⁵⁹ The Cambridge Platonists, who undertook a rational grounding of religious faith, stood alien or hostile to the newer mechanistic natural science despite initial flirting with Cartesianism, and moreover they designed a new metaphysics with the help of scholastic-Aristotelian and neoplatonic-hermetic elements.

⁴⁶⁰ *Considerations touching the usefulness of Experimental Philosophy*, Part I, Essay IV = *Works*, II, 45.

⁴⁶¹ *Appendix to the First Part of the Christian Virtuoso* = *Works*, VI, 683, 685.

⁴⁶² *Op. cit.*, 684.

⁴⁶³ *Op. cit.*, 711.

to recognize the connection between anti-metaphysical attitude and modern science and technology. Both encounter us already in Bacon's writings, which also, as we saw, contain the version of agnosticism typical for the new science. We must therefore turn to these writings now.

3. Bacon and the Revolution of the Traditional Concept of Metaphysics

Bacon's outstanding position in the process described in this book lies not merely in the fact that he undertakes a radical reinterpretation of the concept of metaphysics, which is indicative of the crisis of its traditional content, but beyond that in the fact that this reinterpretation of his constitutes the summary and at the same time the logical outflow of the central anti-metaphysical motifs of the 16th and 17th centuries. The reception of the humanist critique of Aristotelianism and the reflective deepening of the new doctrines of induction and *inventio* are here combined for the first time with the programmatic announcement of the fundamental worldview positions of the new natural science, while at the same time the rejection of traditional metaphysics steps onto the stage as a solemn act of self-consciousness of an essentially new age; the reorientation in the question of metaphysics is, in other words, felt in its connection with a deep historical caesura. Like many thinkers of the early New Times,⁴⁶⁴ Bacon also believes that *veritas filia temporis* [truth is the daughter of time], that truth cannot be given from the beginning, but is recognized gradually in the course of time,⁴⁶⁵ which is why antiquity represents the childhood of humanity, while the modern age constitutes its maturity and surpasses all preceding ones in intellectual respects.⁴⁶⁶ The arrogance, one might say, with which Bacon faces ancient and scholastic thought achievements is grounded in this view.

Particularly interesting for our inquiry is naturally Bacon's critique of Plato and Aristotle, in which the contrast between (new) physics and (traditional) metaphysics already plays a considerable role. The former is in Bacon's eyes more a fantasizing poet than a methodical philosopher.⁴⁶⁷ The doctrine of ideas is a product of fantasy,⁴⁶⁸ and equally unfounded is the view that truths are innate in the human mind.⁴⁶⁹ Plato's gravest error was to have detached the activity of thought from its natural sphere of development, i.e., from the "things themselves," and to have directed it into the creation of nebulous constructions.⁴⁷⁰ His engagement with nature was not an end in itself, but was connected with his general ethical and political

⁴⁶⁴ On this Gentile, *Veritas filia temporis* = Bruno, 227 ff.

⁴⁶⁵ *Novum Organum*, I, 84 = Works, I, 190; cf. *Redargutio Philosophiarum* = Works, III, 563.

⁴⁶⁶ *De Augmentis Scientiarum*, VIII, aphor. 97 = Works, I, 827 f.

⁴⁶⁷ *Cogitata et visa* = Works, III, 602.

⁴⁶⁸ *Novum Organum*, I, 51 = Works, I, 169.

⁴⁶⁹ *Temporis Partus Masculus*, II = Works, III, 530 f.

⁴⁷⁰ *Op. cit.*

aspirations; accordingly, his physics remains dependent on his theology, as shown by its justification through the allegedly world-forming ideas as well as the low scientific level of the Platonic inductive method.⁴⁷¹ The abolition of the independence of physics and thus its disfigurement is also reproached to Aristotle. In his case, the dialectic (logic) to which Aristotle subjected the investigation of nature by operating on the basis of his doctrine of categories bears the main guilt for this. He thus projected logical concepts into things, endowed the latter with fictitious properties, and distorted experience according to his wishes; just as harmful was the application of dialectic to metaphysics.⁴⁷² Bacon acknowledges that Aristotle processed empirical material and did justice to sensory knowledge, but all this was in vain because of dialectic, which abstracted from things and attempted to get a theoretical grip on them through empty words.⁴⁷³ To top it all off, he also destructively fought all earlier philosophies in order to enforce his own dogmatism and the disastrous principle of authority.⁴⁷⁴ Both in this regard and because of their inclination toward useless sophistry, the Scholastics are worthy descendants of Aristotle, this "worst of all sophists."⁴⁷⁵ In the same place, Bacon makes the same accusations against the Scholastics as against Plato and uses almost the same words: they had detached themselves from the sensory world, from things, and from the history of men. As he writes elsewhere, scholastic works, apart from the cult of authority and general sterility, were characterized precisely by the fact that here no real object corresponded to the refined logical constructions.⁴⁷⁶

Bacon's own theoretical goal is therefore obvious: he wants to introduce physics as the only legitimate and fruitful sphere of activity of the human spirit, specifically in its conceptual and content-related contrast to (traditional) metaphysics. When this demand takes the form of a historical observation, it means that metaphysics flourishes where physics is weak, and vice versa. Bacon thus suggests a genetic interpretation of metaphysics that is characteristic of the new intellectual-historical situation created by the rise of the new physics: the development and rule of metaphysics take place in that phase of history in which men neither knew nature exactly enough nor controlled it sufficiently; metaphysics therefore does not constitute the profound exposure of the ontological root of nature, but the ignorance and powerlessness of men vis-à-vis this same nature hidden behind all sorts of fantasies. Metaphysicians, writes Bacon, do not hesitate to set up laws about everything possible; in their sober hours, however, they complain about the enigmatic nature of nature and the weakness of the human spirit,

⁴⁷¹ *Redargutio Philosophiarum* = Works, III, 569.

⁴⁷² *Novum Organum*, I, 63 = Works, I, 173 f.; cf. *Redargutio*, Works, III, 566.

⁴⁷³ *Cogitationes de scientia humana* = Works, III, 188.

⁴⁷⁴ *Novum Organum*, I, 67 = Works, I, 178.

⁴⁷⁵ *Temporis Partus Masculus*, II = Works, III, 529 f.

⁴⁷⁶ *Cogitationes de scientia humana* = Works, III, 187; cf. *Advancement of Learning*, I = Works, III, 285 ff.

complacently transforming the inadequacy of their own knowledge into a reproach against nature.⁴⁷⁷ A fixed and necessary characteristic of the metaphysical attitude is thus the lack of knowledge and control of nature. Bacon contrasts this web of practical powerlessness and theoretical sterility with the principle *verum factum convertuntur* in its application to nature: nature can, in other words, be known and controlled by man because it is structured exactly like the works of man; nature and human products differ only with regard to their *causa efficiens*, not regarding their constitution.⁴⁷⁸ Thus the Aristotelian view of the relationships between nature and art is reversed, according to which the latter is an eternal, imperfect attempt to imitate the former. Art appeared inferior to nature as long as nature was inaccessible to human knowledge and control and was therefore understood more or less as a sphere of activity of supernatural forces, whereby physics also had to function as an appendage or as an (approximate) application of metaphysics. In comparison to the supernatural, nature was of course also imperfect, but compared to human art it nevertheless had the advantage of reflecting the presence and activity of the supernatural—however indirectly and dimly. The separation of physics from metaphysics now goes hand in hand with the approximation of art and nature to one another, whereby the emerging possibility of a domination of nature gives rise to the impression that it is structured according to the inner logic of human works—an impression in which the self-consciousness of the *homo faber* and at the same time the new primacy of anthropology over theology is reflected. All these worldview shifts find their most practically relevant summary and crystallization in the belief in the possibilities of technology, and Bacon expresses this belief in a sharp and theoretically generalized form. His world of thought owes much to the works of unphilosophical authors of the 16th century who possessed technical experiences and from this standpoint rejected the hair-splitting scholarship and the empty cult of antiquity, but he himself, just like Boyle later, does not identify with narrow-minded practiciness, but thinks that the abolition of the primacy of the speculative life must be followed by such a unity of theory and practice or truth and utility that could guarantee the substantial and long-term realization of human practical purposes.⁴⁷⁹ In any case, the overturning of traditional hierarchies and priorities remains radical and irrevocable. One of its consequences is the replacement of the classical ideal type of the metaphysically oriented philosopher, who in solitude grasps the deeper causes of beings thanks to his speculative talent, by the vision of a collective and planned intellectual labor that is closely connected with the practical needs of society and at the same time makes constant and tangible progress.⁴⁸⁰

⁴⁷⁷ *Novum Organum*, I, 75 = *Works*, I, 184.

⁴⁷⁸ *Temporis Partus Masculus*, II = *Works*, III, 531, cf. p. 592.

⁴⁷⁹ Rossi, *Filosofi*, 11 ff., 148 ff. Like Rossi, Armstrong (*Metaphysics*, 10 f.) also rightly polemicizes against the widespread prejudice of Bacon's one-sided practical-utilitarian attitude.

⁴⁸⁰ *Advancement of Learning*, I = *Works*, III, 289 f.

Bacon's conception of the essence and task of logic naturally differs from the Aristotelian one, since it is bound to the idea of a natural science that is not interested in a fixed image of nature in accordance with equally fixed metaphysical principles, but in the dynamic grasp of natural processes in connection with their possible shaping by human activity.⁴⁸¹ As we noted, however, Bacon does not undertake the refutation or modification of Aristotelian logic *ex nihilo* and exclusively with regard to his scientific purposes, but he receives and deepens the preparatory work of the Humanists, with which he was, moreover, intimately familiar due to the English debates and research in the field of rhetoric at that time.⁴⁸² Of Bacon, as of Fracastoro before him, it can be said that he applies the methods of Renaissance rhetoric no longer to the realm of social phenomena, but (primarily) to nature; in this respect, too, he stands somewhere between the intellectual worlds of the Renaissance and modern natural science, whose method is, as is well known, mathematical and whose founder is Galilei—and not Bacon.⁴⁸³ To this observation, however, it must be added that Bacon's particularly close relationship to physics, even when it was not yet mathematical, exerts a considerable influence on the way he receives or evaluates the methodological preparatory work of the Humanists. This is clearly shown in his remarks on the central problem of *inventio*.

Bacon follows the humanist tradition since Agricola when he divides the *artes intellectuales* into four parts, placing *inventio* before *iudicium* and assigning the last two places to mnemonics and the art of teaching.⁴⁸⁴ He is not content, however, like the Humanists, with prioritizing *inventio* over *iudicium*, but goes a step further and distinguishes between two types of *inventio*: one has to do with the sciences and technology, the other serves rhetoric in the broad sense of the word. Remarkably, he does not consider rhetorical *inventio* to be genuine, since, as he writes, *inventio* means discovering the unknown and not merely recapitulating or classifying the known. Thereby the prevalence of the new scientific viewpoints and standards over the humanist-rhetorical ones is solemnly confirmed. Knowing full well that he is speaking of something new, Bacon adds that rhetorical *inventio* is developed, while scientific *inventio* has not yet been worked on, and he promises to take on this task (the promise was redeemed by the

⁴⁸¹ Farrington, *Bacon*, 94.

⁴⁸² On this see Wallace, *Bacon on Communication*, 185 ff., as well as Jardine, *Bacon*, esp. 66 ff.

⁴⁸³ Rossi, *Bacone*, 504 ff.; Rossi devotes many remarkable reflections to the relationships between Bacon and Ramus, see esp. 354 ff., 381 ff., 452 ff. Cf. Ch. I, note 401.

⁴⁸⁴ The following analysis is based on *Advancement of Learning*, II = *Works*, III, 384 ff.

Novum Organum).⁴⁸⁵ His distance from the Humanists also becomes clear when he argues against Ramus that teaching should serve not merely useful application but also the progress of knowledge; teaching should thus convey knowledge and at the same time produce knowledge with the help of the scientific method. Bacon admits that rhetoric has a role to play both in the relationships between teachers and students and among the educated, but at the same time he distinguishes increasingly sharply—following the tendency we met in Zabarella—between logic (as scientific method) and rhetoric (as a form of communication of social individuals). While his high estimation of rhetoric reveals the humanist background of his education, his views on the necessity of a new kind of *inventio* testify to his belonging to the post-humanist era shaped by the new physics.⁴⁸⁶

Bacon's reinterpretation of the terms "first philosophy" and "metaphysics," which we now want to discuss, presupposes in general not only his positions summarized above (from the drastic separation of physics from metaphysics to the detachment of logic as an inductive method from rhetoric), but also two other points. The first is the shift of interest from ontology to the study of the human cognitive faculty, which had already become visible in the 16th century; in Bacon, this results in a replacement of the Aristotelian classification of the sciences on the basis of their respective objects by their classification on the basis of the division of the cognitive faculty into memory, imagination, and reason.⁴⁸⁷ The second point we know from the questionings of the Humanists and Zabarella: it concerns the rejection of the scholastic-Aristotelian fusion of logic and ontology in order to secure the autonomy and universal applicability of logic as a methodical organ. Quite apart from how Bacon would imagine such an autonomous and universally valid logic in detail, it remains a fact that he develops his groundbreaking view of "first philosophy" for the first time in the context of the rejection of the, as it is called, rhapsodic connection of logic with physics and theology. The areas of knowledge, he writes, do not resemble lines that cross at a certain angle, but the branches of a tree that grow from a single trunk and feed from it. This trunk is "first philosophy," which constitutes a universal science, exists independently of the special sciences, and precedes them (at least logically). First philosophy is thus defined as the logically closed sum of all axioms for which no special branch

⁴⁸⁵ One must not lose sight of the difference between Baconian or modern and Aristotelian induction here (cf. Ch. I, Sect. 4 a). As Bacon writes, his path of knowledge, like the Aristotelian one, begins with the senses and individual things in order to culminate in the general – but the Aristotelians concern themselves only superficially with empirical phenomena, and they leave them as soon as possible to arrive with a leap at substances and universals, whereas induction should actually linger with experience until it can extract its generalizations from it; the new logic should likewise derive its principles from the practice of the individual sciences. See *Novum Organum*, Distributio and I, 22 = *Works*, I, 136 f., 160; cf. *Partis Instaurationis Secundae* = *Works*, III, 547 ff.

⁴⁸⁶ Cf. Howell, *Logic and Rhetoric*, 365 ff.

⁴⁸⁷ The following analysis is based on *Advancement of Learning* II = *Works*, III, 300 ff., 350 ff.

of philosophy or science is responsible, but which can be applied to all and thus enjoy a higher status. Examples of such axioms are: "if equals are added to unequals, the inequality remains," "things equal to a third are also equal to each other," etc. Another task of first philosophy consists in the investigation of general relations and qualities such as equality, difference, possibility, etc.—on the condition, of course, that this investigation does not take place *in abstracto*, but keeps in mind the concrete existence of such magnitudes in nature. Bacon's view of this special task of first philosophy thus differs significantly from the corresponding scholastic-Aristotelian one.⁴⁸⁸

Bacon's second terminological innovation is that he no longer considers first philosophy and "metaphysics" to be synonymous, but grants the latter lesser competencies than the former. While first philosophy deals with principles and concepts that can be applied to all areas of knowledge, metaphysics, according to Bacon's definition, deals only with the general fixed principles of physics. By making metaphysics the theoretical crown of physics, Bacon is obviously thinking of the etymology of the word, which suggests this. In this way, however, he deprives the term "metaphysics" of its traditional content, without, however, incorporating it into first philosophy, which has only epistemological and not ontological tasks to master. But even Bacon's "metaphysics" makes no highest claims to knowledge in an ontological respect, and it even uses agnostic arguments, whereby its contrast to the traditional concept of metaphysics is additionally emphasized.⁴⁸⁹ As Bacon thinks, his "metaphysics" stands much closer to the peak of scientific knowledge than ordinary physics, since it conveys general truths about nature; however, it does not reach even this peak, namely the ultimate secret of creation, for such knowledge is reserved only for God. Following its complete detachment from the questionings of traditional metaphysics, Bacon's "metaphysics" now unfolds its theoretical activity on the basis of a division of labor with physics. The possibility of such a division of labor implies, of course, that there are considerable commonalities between Bacon's "metaphysics" and physics. First, the object of metaphysics is the empirical, natural world and not, for instance, the world of man or of the spirit; second, metaphysics makes generalizations with a universal claim, but it always remains part of empirical science and uses the same method as the latter, so it does not constitute a meta-scientific "philosophy";⁴⁹⁰ third, the purpose of metaphysics is practical, and its generalizations allow for a much greater influence on the

⁴⁸⁸ See on this Anderson, *Bacon*, 214 f.

⁴⁸⁹ The reasons for the reinterpretation of the concept of metaphysics are thus polemical. Armstrong (*Metaphysics*, 6, 29) is mistaken when he thinks Bacon continues to use the term "metaphysics" because he does not give up the Aristotelian theory of form; we shall see immediately, moreover, that Bacon does not identify form, as he understands it, with the (second) substance in the Aristotelian sense.

⁴⁹⁰ On these two points see Wheatley, *Redefinition*, 493 f.

behavior of nature for human purposes than the special and fragmentary statements of physics in the narrower sense.

Baconian metaphysics and physics examine natural phenomena in two different, but complementary respects. The former attempts namely to grasp the general, abstractly formulable, and immutable aspects of those phenomena, while the latter sees the phenomena in their concrete materiality and thus in their mutable and transitory character. As Bacon expresses himself using Aristotelian terminology, physics investigates material and efficient causes, while metaphysics deals with formal and final causes. He makes clear, moreover, that forms are by no means located outside of matter and also by no means coincide with the so-called second substances, which were supposed to be grasped intellectually through Aristotelian definition. The task is therefore not to find out the form of the lion or of gold, for example, but rather to register and classify the fundamental qualities in nature, such as cold and warm, heavy and light, dense and thin, colors, etc., after we have reduced them to their actual nature or form. The sum of the possible forms of natural bodies can, as Bacon believes, yield a true alphabet of nature, which would enable us not only to read nature anew, but also to write it anew. To be sure, when Bacon speaks of forms as ultimate constituents or components of the world, he remains with a pre-mathematical view; forms do not constitute mathematical laws of combination of natural elements with one another—although Bacon counts mathematics among the branches of his metaphysics, since it deals with quantity, i.e., a fundamental form of things. This partial interlacing of mathematics and new metaphysics was symptomatic of the just-emerging tendencies, even if Bacon remains rather with conventional ways of thinking in this regard. It would be a mistake, however, to think that he remains attached to tradition also because he charged his metaphysics with the investigation not only of formal but also of final causes.⁴⁹¹ For Bacon, who incidentally elsewhere unequivocally designates the scholastic-Aristotelian search for *causae finales* in nature as unfruitful,⁴⁹² uses this reference of his to the mentioned causes only to hammer home that they ultimately coincide with natural causes as such and that only a retrospective consideration of natural processes makes the effects appear as intentions. Bacon formulates here an argument that will be used often in the course of the 17th and 18th centuries by those who combat the doctrine of *causae finales* but at the same time want to avoid a frontal conflict with theology: namely that God realizes his intention precisely *through* natural laws and not through their suspension.⁴⁹³

⁴⁹¹ This error is committed by Wheatley, *op. cit.*, 495.

⁴⁹² *De Augmentis Scientiarum*, III, 5 = *Works*, I, 571.

⁴⁹³ See e.g. Gassendi, *Syntagma Philos.*, II = *Physica*, Sect. I, Lib. VII, 7 = *Opera*, I, 494 A, as well as Boyle, *A Free Inquiry into the received Notion of Nature* = *Works*, V, 199.

Through his new interpretation of the term "first philosophy," Bacon becomes one of the first great representatives of the idea of a universal science that could dictate its regulative principles to the special sciences. This ideal of a huge and at the same time simple unification of all areas of knowledge around the axis of a few ultimate epistemological principles is later formulated by Descartes and Leibniz in mathematical language and is also reflected in the attempts of the 17th century to create a logically clear universal language.⁴⁹⁴ Its anti-metaphysical point becomes clear when we consider that the unification of all areas of knowledge under the sign of certain fundamental principles corresponds to the worldview of the new natural science, i.e., the conception of a homogeneous nature in which a uniform lawfulness prevails. From the moment in which all this combines with the demand for (primary) concentration of human activity on the sensible world, both the traditional ontological hierarchy and the hierarchy of knowledge grown together with it fall away, which meant that on every ontological level a different type of knowledge applied, whereby of course the highest of these types related to the highest ontological level. World and knowledge are now unified and simplified—the primacy of epistemology even turns the structure of the world into a reflection of the structure of knowledge. This approach must be particularly emphasized if we want to understand the purely epistemological meaning that was often attributed to the term "metaphysics" from the 17th century onwards. Initially, of course, both Bacon and Hobbes (see the next section) spoke of a first philosophy in the sense of a science of first principles. We know, however, that Boyle already used the term "metaphysics" in precisely the same sense, and this usage has also prevailed in most cases.

⁴⁹⁴ See McRae, *Unity of Science*, as well as Cohen, *Project*.

4. The Anti-Metaphysical Attitude of the Representatives of the New Natural Science: Galileo, Gassendi and Hobbes

In Galileo's grandiose work, that long process is summarized and at the same time finds its classical conceptual crystallization, in which the primacy of the *certitudo obiecti* of the object was replaced by the primacy of the *certitudo modi procedendi*. The object of theology possesses a higher dignity, but science grants us greater certainty, emphasizes Galileo.⁴⁹⁵ Thus he reaffirms the abolition of the necessary binding of rational knowledge to the sphere of the transcendent spirit according to the standards of traditional metaphysics and names empirical nature the only legitimate and fruitful sphere of activity for such knowledge; as he tirelessly repeats, the object of philosophical thought lies in the "great book of nature",⁴⁹⁶ i.e. in the "sensible world".⁴⁹⁷ By shifting the goal and object of knowledge, Galileo does not merely pass from one level of conventional ontological hierarchy to another without changing the external structure of this hierarchy and the inner arrangement of its levels. Quite the contrary. The decision for the reorientation of knowledge is substantially connected with the inner and outer transformation of that hierarchy. In other words, Galileo rejects the traditional metaphysical conviction that nature is ontologically inferior, i.e. internally unstable and therefore not completely knowable, and simultaneously defends both the detachment of knowledge from the Transcendent and the retention of its rational character, which until then only the bond to the Transcendent seemed to guarantee. The *certitudo modi procedendi* is now placed in the foreground so self-confidently precisely because the shifting of the level of knowledge does not impair the quality of knowledge at all. But if the knowledge of nature is in no way inferior to the former highest or metaphysical knowledge in terms of clarity and certainty, then the elimination of the latter does not mean an irreparable loss, as its champions believed. Thus, as already said, the new

⁴⁹⁵ Letter to the Grand Duchess of Tuscany (1615) = *Opere*, V, 324 f.

⁴⁹⁶ *Dialogo*, Epist. Ded. = *Opere*, VII, 27.

⁴⁹⁷ *Op. cit.*, II = *Opere*, VII, 139.

assessment of the possibilities and the nature of scientific knowledge goes hand in hand with the abandonment of traditional cognitive and ontological priorities.

This means that the decisive characteristic is awarded to the sensible, natural world which traditional metaphysics ascribed only to the Transcendent, i.e. the rational ontological constitution as a prerequisite for rational grasping. Since he is clear about the revolutionary implications of this view, Galileo emphasizes on every occasion that nature is a perfectly ordered whole,⁴⁹⁸ that it acts with necessity and never violates its own laws,⁴⁹⁹ that it always makes use of the simplest means.⁵⁰⁰ Precisely this rational structure of nature now permits the application of mathematics to physics⁵⁰¹ and ultimately also guarantees the certainty of the method in its contrast to the metaphysical *certitudo obiecti*. It must be recalled here that the scholastic-Aristotelian view did not question the highest degree of certainty of mathematics; but by reserving the highest truths for metaphysics, while on the other hand excluding the possibility of an application of abstract and rationally structured mathematics to an empirically given and mutable nature, it left mathematics hovering without its own field of application, as it were, between metaphysics and physics.⁵⁰² Galileo thus turns the traditional position upside down not because he accepts the highest certainty of mathematical knowledge as such, but on the basis of his belief in the mathematical graspability of natural phenomena. To the scholastic-Aristotelian denial of a correspondence between concrete natural qualities and abstract quantitative mathematical consideration, he counters that what happens on the level of concrete magnitudes repeats itself on the level of abstraction.⁵⁰³ This close connection of the

⁴⁹⁸ *Op. cit.*, I = *Opere*, VII, 43.

⁴⁹⁹ Letter to Castelli of Dec. 21, 1613 = *Opere*, V, 283.

⁵⁰⁰ *Discorsi e dimostrazioni*, III = *Opere*, VIII, 197.

⁵⁰¹ *Dialogo*, I = *Opere*, VII, 38. The necessary connection between the conviction of the rational structure of nature and the application of the mathematical method in the field of natural science proves that Galilei does not adopt the mathematical ideal because he feels himself a Platonist. For apart from the fact that the actually metaphysical component of Platonism remains quite alien to him, he understands the coupling of physics and mathematics quite differently than Plato. As Shapere (*Descartes and Plato*, esp. 574 f.) showed against Koyré, nature behaves for Plato, unlike for Galilei, largely unpredictably and irrationally; therefore, the application of mathematics to the study of natural phenomena is suggested not by the structure of nature itself, but by our own intention to bring natural phenomena somewhat into order by introducing a rationality into them from outside which they do not possess in themselves. Cf. the excellent analysis by McTighe, *Galileos 'Platonism'*, esp. 367, 370 f. Strong (*The Relationship...*, esp. 355, 362) emphasized for his part that Galilei's connection of mathematics and experiment is unthinkable for Plato, and furthermore he referred to Galilei's close relationship to the technical practice of his time as a prerequisite for his mathematical natural science. Cassirer found this interpretation one-sided and supported Koyré's argumentation in order to highlight the general philosophical character of Galilei's views — but he did so with so many reservations (*Mathematic Mysticism*, esp. 342 f., 344, 346) that Strong could rightly think Cassirer's interpretation was closer to his own than to Koyré's.

⁵⁰² Kondylis, *Aufklärung*, 89.

⁵⁰³ *Dialogo*, II = *Opere*, VII, 233.

logical and the real implies that mathematical method can and even must be *ars inveniendi* [art of finding], for, if reality is rationally structured, then it is also predictable; on the basis of known data, the hitherto unknown can be reconstructed within the framework of a rationally ordered whole, and the task of the method consists in finding out the hitherto unknown magnitudes in the process of (re)construction of a rational whole on the basis of existing data. The method must be mathematical, for precisely the application of mathematics to the realm of natural phenomena permits the grasping of the same in the form of equations in which the unknown magnitudes can be determined by means of the known, which clears the path of *inventio*. Aristotelian logic, writes Galileo, on the contrary helps *inventio* just as little as the knowledge of poetics is of use for the composition of a beautiful poem.⁵⁰⁴ Logic can check the formal correctness of conclusions in retrospect, but not point the way to their finding.⁵⁰⁵

The conviction of the rational structure of nature thus amounts to the mathematical grasping or mathematization of this latter; according to Galileo's famous expression, the book of nature is written with geometric figures.⁵⁰⁶ But if the being as being is replaced by the being as geometric figure, then the hierarchically structured pyramid of substances collapses immediately, which had been set up in such a way that the pure and immutable concept of being stood at its peak. The exceptional classification of all beings into the world of geometric figures levels them; as Galileo emphasizes, there are henceforth no heavenly and earthly, eternal and perishable things, all are equally old and noble—moreover, nothing that is not eternal can constitute a part of nature,⁵⁰⁷ since the order of the world is one and indivisible, i.e. the same from the beginning.⁵⁰⁸ In this way the world is unified, it becomes homogeneous, and the classic metaphysical distinction between being and becoming falls away, of which the former could offer certain, the latter only probable knowledge; being now forms merely the immutable mathematical lawfulness of becoming. Precisely for this reason Galileo does not fear that the replacement of the Aristotelian primacy of rest by the primacy of motion, as reflected in the formulation of the

⁵⁰⁴ *Dialogo*, I = *Opere*, VII, 59 f.

⁵⁰⁵ *Discorsi e dimostrazioni*, II = *Opere*, VIII, 175. Gilbert evidently has this sharp contrast between mathematical method and Aristotelian logic in mind when he thinks one should not overestimate Zabarella's influence on Galilei's methodology (as Randall does), since Zabarella was not a mathematician and did not advocate the application of mathematics to physics either. Gilbert admits, however, that such an influence can be considered possible under two conditions: that there was an inner connection between mathematical synthesis or analysis and Zabarella's *methodus compositivus* or *resolutivus* — or that Galilei was inspired by the debate at that time about the applicability of Aristotelian *demonstratio* in the field of mathematics (*Galileo*, 227, 229). Both are more than probable. There are, moreover, passages in which Galilei praises the fruitful aspects of Aristotelian methodology, see e.g. his letter to Liceti of Sept. 15, 1640 = *Opere*, XVIII, 248 f.; cf. *Macchie Solari*, II = *Opere*, V, 138 f. Cf. Ch. I, note 357.

⁵⁰⁶ *Saggiatore*, 6 = *Opere*, VI, 232.

⁵⁰⁷ *Dialogo*, II = *Opere*, VII, 160.

⁵⁰⁸ *Postille* = *Opere*, VII, 700.

principle of inertia, could endanger the ideal of solid mathematical knowledge. He therefore does not hesitate to turn the traditional priorities unequivocally upside down and almost provocatively declare his preference for movable and changeable things over immovable and immutable ones.⁵⁰⁹ As we will also see in Hobbes' example, change and motion contribute precisely in their subjection to immutable laws to the unification of ontological levels, since their effect now extends over everything and thereby the separation of the cosmos into an immutable and a mutable sphere is eliminated.

The close connection of metaphysics and physics within Aristotelian philosophy had to result in a radical change of the relationships between the Beyond and the Here and Now from the moment when the character of the latter changed through its ontological unification and its subjection to a mathematically knowable lawfulness. The change of the structure of nature influences substantially not only the character of God but also the determination of his relationships to the world. Galileo certainly accepts the dualism of God and world or of spirit and matter, since he takes it for granted that the creator and lawgiver of a geometrically structured world can only be a divine geometer; in this sense he calls nature the most obedient executor of divine commands.⁵¹⁰ The dualism thus remains preserved in this form, but at the same time it is undermined by the fact that Galileo believes in the exact structural correspondence between God's mathematical thinking and the mathematical constitution of the world.⁵¹¹ The Aristotelian God, this *intellectus purus*, moved a world that was constituted quite differently than he, i.e. it was material and at least partly mutable and perishable; Galileo's God creates a world that forms a faithful image of his own thinking, and this leads again to the observation of the close affinity between divine and human intellect, since this too is capable of highest intensity, even if its extensity must remain behind that of the divine spirit.⁵¹² This (at least partial) coincidence of divine and human intellect on the basis of mathematical knowledge means, however, that the character of metaphysics changes drastically. Divine knowledge is actually the knowledge of highest epistemological principles, which can also be summarized in the framework of a metaphysics. In this way, and although Galileo is perhaps not at all aware of it, he moves, as far as the reinterpretation of the concept of metaphysics is concerned, in the same direction as Bacon, who admittedly hardly referred to God and mathematics; when mathematics and theology were programmatically combined with each other, this development flowed into Malebranche.⁵¹³ But Galileo also takes a second step towards the elimination of the dualism of God and world, which he fundamentally affirms. Since divine intellect and structure

⁵⁰⁹ *Dialogo*, I = *Opere*, VII, 83.

⁵¹⁰ Letter to Castelli of Dec. 21, 1613 = *Opere*, V, 282.

⁵¹¹ Cf. Olgiati, *Metafisica*, 158 f.

⁵¹² See above notes 28–31 in this chapter.

⁵¹³ See below Sect. 5 f in this chapter.

of the world correspond to each other, God is henceforth conceived and depicted according to the discoveries or laws of natural science. The constitution of the Here and Now determines factually the constitution and function of the Beyond. God can do and think nothing other than what the immutable lawfulness of the world dictates to him, as it is formulated by mathematical natural science.

The mathematization of the world meant its automatic ontological upgrading, since it now appeared rationally structured and graspable—just as the highest object of metaphysics was earlier. But this mathematization was also for its part only possible under the condition that the sensible world was stripped of its concrete perceptible qualities, to which pure mathematical relations cannot be applied. The ontological upgrading of nature thus by no means went hand in hand with the assumption of a consistent empiricism. Behind the unstable apparent world of the senses towered anew, albeit this time in a completely different sense, the "true" reality, the reality of pure mathematical magnitudes, which, as Galileo writes, is not subject to accidental changes.⁵¹⁴ To recognize the inner mathematical structure of phenomena, we must strip them of their sensible husk.⁵¹⁵ Qualitative-sensible and quantitative-mathematical magnitudes belong here to the same phenomenon, and the determination of the latter means neither an elimination of the appearance in the name of its "essence" nor a classification of this essence into a hierarchy of substances; no road leads back to Aristotelianism. On the other hand, it is the case that Galileo fights the invisible hierarchy of substances and Aristotelian metaphysics in general not with regard to their internal weaknesses or simply from an agnostic point of view, but he does this as a representative of an organized and complete theory about the "true" reality, which is no less supersensible than the Aristotelian one, although it does not want to be transcendent. In this sense we can speak of "Galileo's metaphysical phenomenalism"⁵¹⁶ —a term which in itself confirms our view that to the extent that metaphysical questions survive after the emergence of

⁵¹⁴ *Discorsi e dimostrazioni*, I = *Opere*, VIII, 51.

⁵¹⁵ *Dialogo*, II = *Opere*, VII, 234.

⁵¹⁶ Olgiati uses the expression, *Metafisica*, esp. 106 f., 162 f., cf. 132 on Galilei's adherence to phenomena while simultaneously distinguishing between their quantitative and qualitative aspects. Cassirer also speaks of a metaphysics of the immanent (in contrast to the metaphysics of transcendence) in Galilei, see *Mathematical Mysticism*, 343. Penati thinks in the sense of Olgiati's distinction between traditional and phenomenalistic metaphysics that Galilei is indeed an opponent of metaphysics if this is defined as the search for the truly existing, but must himself be designated as a metaphysician if we understand by metaphysics the transcending of immediate experience for the purpose of grasping a deeper reality standing behind it (*Galilei*, 451). The juxtaposition of these two concepts of metaphysics raises some questions, but it must be accepted if it is meant to imply that Galilei, despite transcending immediate experience, considers material nature the only legitimate sphere of activity for rational thought. The undifferentiated use of the term "metaphysics" in connection with Galilei (see e.g. Crombie, *Galilei*, 356 f.) seems to suggest a historically non-existent continuity of metaphysics and its questioning. It should also be recalled here of the expression "anti-metaphysical metaphysics", which Kaulbach (*Einleitung*, 121) uses to designate the unified lawful worldview of mathematical physics.

mathematical natural science, they change their content substantially. In this process, the term "metaphysics" can acquire meanings that are directly opposed to traditional ones, or it can be combined with adjectives that seem to suggest the opposite of it. The ambivalence of terms and concepts is essentially characteristic of the situation in which the problem of substance arose anew, while simultaneously traditional metaphysics was eliminated. In other words: the problem of substance, as traditional metaphysics knew it, was cleared out of the way together with metaphysics in the sense of the investigation of the being as being, but this was done in the name of a new overall conception of reality, which placed the true world behind the perceptible facade of phenomena, albeit in close connection with this latter. Although the separation between primary-mathematical and secondary-sensible properties takes place within the "phenomenon", it nevertheless allows the impression to arise that a new form of the old relationship between substance and accidents is present here. But the substance that now stands behind the sensible properties forms a mathematical magnitude, it is quantity that carries qualities—it thus coincides merely with one of the Aristotelian accidents, and therefore it differs thoroughly from the Aristotelian substance.

The radically new character of the problem of substance becomes clear in two further significant respects. First, this problem is increasingly (and also outside the realm of mathematical natural science) intertwined with the problem of function, so that sometimes, as Spinoza's example will show us,⁵¹⁷ substance and function seem to coincide. If the essence of things can be expressed by mathematical magnitudes, then it must ultimately coincide with the lawful relation of these magnitudes to one another; as said, being in this case forms nothing other than the immutable lawfulness of becoming. Second, the new understanding of the problem of substance is characterized by its increasingly close connection with the parallel developing epistemological questioning. The separation between primary and secondary properties posed the question of the reliability of the senses and thus of the relationships and competencies of intellect and sensibility with a sharpness that (scholastic) Aristotelianism had not known. Although Galileo gives a strong impulse to the new epistemology in this perspective, he himself does not accept the primacy of epistemology if this means the view that our world picture is function and product of our cognitive faculty and its validity cannot be finally proven, since the essence of things must remain inaccessible to us. Certainly, Galileo emphasizes on various occasions the relativity and subjectivity of human cognitive perspective, e.g. when he writes that concepts like "large and small" or "near" and "far" are relative and bound to linguistic habits of certain subjects,⁵¹⁸ or when he remarks that secondary properties would not exist without human senses.⁵¹⁹ But he does not doubt in the least that the geometric figures and relations that stand

⁵¹⁷ See below Sect. 5 e of this chapter.

⁵¹⁸ *Dialogo*, III = *Opere*, VII, 396; *Saggiatore*, 14 = *Opere*, VI, 264.

⁵¹⁹ *Saggiatore*, 48 = *Opere*, VI, 350.

behind the shimmering sense data are objectively given and objectively knowable. The objectivity of human knowledge rests precisely on the priority of the rational order of things over the rational order of knowledge.⁵²⁰ In this sense knowledge remains subject to being and substance. The radically new way in which the question of substance is now posed brings it about, however, that epistemological problems step increasingly into the foreground.

As for Gassendi, the remark must be prefaced that he can only be reckoned among the representatives of the new natural science generously, since this is primarily characterized by the application of the mathematical method. Gassendi is certainly alien to this [method], but on the other hand he formulates emphatically some worldview prerequisites of the new natural science, such as the rejection of the ideological monopoly of theology and its authorities as well as the consideration of the sensible world as the only possible and legitimate sphere of activity of human thought activity. In this Gassendi is similar to Bacon, but more instructive than the explanation of his spiritual similarity with Bacon is the determination of his differences from Galileo. The latter believes that mathematical knowledge can unlock the essence of things and that traditional metaphysics must fall precisely because the essence of things proves to be something different from what that [metaphysics] imagined; on the contrary, Gassendi, for whom mathematics does not explain the causes and the essence of things but merely serves for a better description of phenomena,⁵²¹ cannot oppose any new certainty about the "true" nature of things to traditional metaphysics, and accordingly he uses agnosticism as the main anti-metaphysical argument; his other arguments are also taken from the humanist literature of the 15th and 16th centuries known to us. Between stopping at agnosticism as the main anti-metaphysical argument and the epistemological disparagement of mathematics there is thus a necessary logical and historical relationship.⁵²²

With Gassendi, as with the Humanists too, agnosticism has two aspects: on the one hand the (fideistic) rejection of any mixing of metaphysics (as rational knowledge) and theology,⁵²³ on the other the denial of the knowability of substances; not substances, but only sensible qualities

⁵²⁰ *Dialogo*, II = *Opere*, VII, 289.

⁵²¹ *Exercitationes*, II = *Opera*, III, 208 B–209 B.

⁵²² This must be emphasized against researchers who one-sidedly highlight the significance of humanist metaphysics critique for the emergence of modern science (thus e.g. Gregory, *Polemica*, esp. 135 f., in connection with Gassendi). In doing so, they do not distinguish between the worldview presuppositions of modern science and its concrete content; and although they rightly note the influence of humanist thought motifs, they overlook that the path from the humanist circle of ideas to modern science is not straight, but has a sharp curve at the point where the view prevails that nature is rationally structured, i.e., it forms a coherent whole of rationally knowable mathematical relations. In this question, just as in the question of the formation of the scientific method, we must therefore reject the scientistic and the humanist interpretation simultaneously. Cf. Ch. I, note 357, and note 92 in this chapter.

⁵²³ See e.g. *Exercitationes*, I = *Opera*, III, 108 B.

could we know.⁵²⁴ This agnosticism aims to separate philosophizing completely from traditional questions about the supersensible etc. and to reinforce and consolidate the turn to the sensible world accordingly.⁵²⁵ In contrast to the Humanists, however, Gassendi understands by sensible world primarily nature and only secondarily society; we must read the book of nature if we want to have certainties.⁵²⁶ His remaining with the pre-mathematical-humanistic view comes to light again when he appeals to the principle *verum factum convertuntur* to prove that we cannot know nature in its essence because we do not create it; the Aristotelian view on the relationships between nature and art is thus not questioned here.⁵²⁷ While Galileo denies the knowability of substances only to the extent that the fight against traditional metaphysics requires it, and by no means hesitates to assert both the complete knowability of nature through mathematics and its reconstructibility through technology, Gassendi, who represents a much more consistent agnosticism, stands only in the vestibule of the New Times.

The worldview decision for the turn to nature as the only legitimate and fruitful sphere of development of human thought activity is accompanied by a vehement rhetoric that takes the field against all aspects of scholastic-Aristotelian philosophy which seem to stand in the way of the investigation of the empirically given world: such are the belief in authorities and the deification of Aristotle, the suppression of other philosophical directions and the suspicion of free research in the name of tradition and dogma.⁵²⁸ The indifference of (scholastic) Aristotelianism towards concrete empirical diversity has the consequence that here dialectic is considered a general method with equal application possibilities on all ontological levels, whereas Gassendi thinks that every field of knowledge has its own mode of knowledge, e.g. arithmetic counting, physics perception, theology revelation etc.⁵²⁹ Gassendi's defense of methodical diversity hangs together with his refusal to accept the universal validity of mathematical mode of knowledge; Galileo or Descartes were of one opinion with Gassendi when it came to the reduction of theological mode of knowledge to revelation (which incidentally amounted to the monopolization of rational thought by profane interests), but they represented quite different views on the possibility of a method with universal claim. But if Gassendi does not grasp the way in which mathematical consideration unified the various levels of the world and simultaneously brought the structure of knowledge and the structure of the world under a common denominator, he contributes on the other hand himself to the dissolution of the traditional hierarchy of substances by reviving Democritean-Epicurean

⁵²⁴ *Ad librum D. E. Herberti Angli De Veritate Epistola* = *Opera*, III, 413 AB.

⁵²⁵ *Exercitationes*, I = *Opera*, III, 107 B. Cf. above Sect. 2, p. 159 f.

⁵²⁶ *Examen Philosophiae Fluddi* = *Opera*, III, 266.

⁵²⁷ *Ad librum Herberti...* = *Opera*, III, 413 B–414 A.

⁵²⁸ *Exercitationes*, I = *Opera*, III, 111 ff.

⁵²⁹ *Op. cit.*, II = *Opera*, III, 152 AB.

atomism and adopting the nominalist thesis that there are only *naturae singulares*.⁵³⁰ This implies, of course, a rejection of the entire system of Aristotelian logic or ontology: for if the particular constitution of an individual, and only this, makes up its substance, then the individual can no longer be recognized on the basis of the nearest genus and the specific difference.⁵³¹ As Vives or Nizolio, for example, had already emphasized, it is difficult to find out the true specific difference in each case, since this presupposes an exhaustive knowledge of all similar individuals.⁵³² Moreover, a definition in the Aristotelian sense is impossible, for it forces us to assume increasingly extensive genera until we reach the concept of being, which is, however, quite vague.⁵³³ With the rejection of universals hangs together, on the other hand, the critique of deduction and the syllogism.⁵³⁴ In all these points Gassendi repeats the known humanistic positions, and his personal contribution to anti-metaphysical argumentation remains correspondingly limited.

Hobbes sees much more clearly than Gassendi that an essential characteristic of the new natural science consists in the unity and homogeneity of the world picture, which, as we know, destroyed the cosmological assumptions of Aristotelianism and simultaneously undermined the associated metaphysics. Although Hobbes divides things into products of man (mathematics and ethical-political phenomena) and products of nature (natural bodies of all kinds), he does not recognize like Gassendi the methodological autonomy of each area, but restricts himself to the observation that in the investigation of the first named deduction appears most appropriate, in that of the latter however induction;⁵³⁵ induction and deduction remain nevertheless the two sides of one and the same method, one and the same philosophy—since philosophy is nothing other than the knowledge of effects on the basis of causes or vice versa.⁵³⁶ This two-sided but uniform method is applied to an equally uniform and homogeneous world, a world that knows no qualitative differences between its various levels, but consists exclusively of natural bodies and their lawful movements. The pioneering step that Hobbes takes beyond Galileo is the abolition of dualism not only within the world picture, but also between God and world. In other words: materialism permits Hobbes the radical and final abolition of any separation between Here and Beyond. Hobbes speaks of God often enough for understandable reasons, but apart from the fact that he wants to know nothing of a mixing of theology and philosophy and

⁵³⁰ *Op. cit.*, 159 A. It must be noted that Gassendi, like the Humanists, accepts this nominalist principle, but at the same time reckons Nominalism as an intellectual current among the variants of scholastic Aristotelianism (see e.g. 112 A).

⁵³¹ *Op. cit.*, 184 B.

⁵³² *Op. cit.*, 184 B–187 B.

⁵³³ *Op. cit.*, 183 B–184 A.

⁵³⁴ *Op. cit.*, 187 B–191 A.

⁵³⁵ *De homine*, X, 4–5 = *Opera*, I, 92–4; *De corpore*, XXV, 1 = *Opera*, I, 315 f.

⁵³⁶ *De corpore*, I, 1, § 2 = *Opera*, I, 2.

considers the former a matter of faith,⁵³⁷ he also formulates within the framework of his natural philosophy certain theses which indirectly, but (at least for the attentive reader) unequivocally make the existence of God logically impossible. It concerns theses that can be derived from the consideration of the world as a sum of moving bodies and logically imply that God must be such a body of the material universe—whereby, of course, the concept of God loses its meaning. The universe, writes Hobbes, is a body with three dimensions, and every part of it must also be a body; since there can be nothing outside the universe, the so-called spirits also necessarily constitute material bodies, if they exist at all; whoever calls God "incorporeal" proves rather his intention to honor him than his knowledge of him.⁵³⁸ Hobbes says expressly, by the way, that God is either identical with the universe or a part of it.⁵³⁹ In the former case his existence has no practical significance, since it concerns not the constitution of the universe but only its name. But also in the latter case the consequences for God are no less fatal: for if God coincides with a part of the universe, he cannot have existed before the universe and created it: the part, as part, cannot precede the whole to which it belongs temporally or logically.

The factual abolition of God is also implied by Hobbes' theory of motion. According to the Aristotelian view, motion could only come about through the immediate contact of mover and moved, and therefore it had to cease after every interruption of this contact. Therefore the First Mover, i.e. God, had to lend motion to the world constantly, so it was not sufficient to set it in motion once and for all, for it was assumed that motion could not perpetuate itself on its own.⁵⁴⁰ As the fact already shows that the First Mover itself was held to be immovable, the Aristotelian theory of motion was rooted in the conviction that rest as the mode of being of the immutable and imperishable is ontologically superior to motion as the cause of change and decay. Between the scholastic-Aristotelian and the modern principle of inertia there is thus an essential difference: according to the former a body remains in the state of rest if it is already in it, or it tends to the state of rest if it moves—while according to the latter a body that moves uniformly tends by no means to rest, but moves infinitely.⁵⁴¹ The self-perpetuation of motion, to which Galileo confesses as one of the first,⁵⁴² changes the role of the First Mover as well as the relationships between God and world drastically: a first impulse on the part of God is now considered sufficient for the world to be able to move eternally, and thus the constant interference of God in the world appears superfluous at least from the view of new physics. Hobbes, who incidentally praises Galileo in high tones for having broken the path for the new

⁵³⁷ *Op. cit.*, § 8 = *Opera*, I, 8.

⁵³⁸ *Leviathan*, chap. 46, 34 = *Works*, III, 671 ff., 380 ff.

⁵³⁹ *Answer to Bramhall* = *Works*, IV, 349.

⁵⁴⁰ Wieland, *Die aristotel. Physik*, esp. 234, 236 f., 314 f., 336 f.

⁵⁴¹ Maier, *An der Grenze*, 185.

⁵⁴² *Macchie solari*, II = *Opere*, V, 134.

physics by the discovery of the true nature of motion, goes a step further now.⁵⁴³ For him there is namely no longer rest as the opposite of motion, rest and motion are only opposing names, since motion can in reality not be interrupted by rest but only by another motion.⁵⁴⁴ Rest thus comes about only through a counterforce or countermotion; now motion produces rest, not vice versa, and *a fortiori* motion can only be produced by motion.⁵⁴⁵ By seeking the cause of motion in an eternal universal motion and not in the eternal but immovable mover,⁵⁴⁶ Hobbes excludes metaphysical research in the sense of the search for a first cause of motion and simultaneously the idea of a transcendent God. God transforms into a contourless ghost that gradually dissolves in the multitude of bodies and motions. The fundamental metaphysical distinction between Beyond and Here and Now slackens in the face of the ultimate theoretical consequences of the new cosmology and theory of motion.

The reduction of all phenomena of the world (including the ethical and social) to bodies and motions implies the identification of philosophy and physics as the general doctrine of bodies and motions. The unification of the world and the fields of knowledge permits the development of a universal science whose task consists in the selection and definition of concepts that are indispensable for the explanation of the constitution and origin of bodies; these are concepts like space, time, form, matter, quality, quantity, substance, accident etc.⁵⁴⁷ Hobbes calls this universal science "first philosophy", for the term "metaphysics" is doubly burdened in his eyes: on the one hand it referred to the realm that lay Beyond physics, and on the other hand it was connected with the theological definition of this realm as the realm of the Supernatural. Such a metaphysics could obviously hardly be reconciled with the Hobbesian (factual) identification of philosophy and physics—an identification that was intended to suggest precisely the (factual) abolition of the separation between Here and Beyond. Remarkably, Hobbes lends additional emphasis to his detachment from (traditional) metaphysics by avoiding, contrary to Bacon's example, using the term "metaphysics" to designate the general science of nature in contrast to the special branches of physics—although his "first philosophy" consciously and programmatically wants to be such a general science of nature. Presumably Hobbes' reservations against Bacon's use of the term "metaphysics" were reinforced by the fact that Bacon charged his "metaphysics" with the investigation of forms and final causes, whose prehistory within the framework of scholastic-Aristotelian metaphysics was long and well-known; at least in this respect Hobbes might have felt Bacon's adherence to the term as yielding in the matter too. This can be gathered from the persistence with which he wants to

⁵⁴³ *De corpore*, Epist. Dedic. = *Opera*, I (no page numbers).

⁵⁴⁴ *Op. cit.*, II, 9, § 7 = *Opera*, I, 111.

⁵⁴⁵ *Op. cit.*, 110.

⁵⁴⁶ *Op. cit.*, I, 6, § 5 and XXVI, 1 = *Opera*, I, 62, 336.

⁵⁴⁷ *Leviathan*, chap. 46 = *Works*, III, 671 ff. The following analysis is based on this text.

eradicate the investigation of formal and final causes from philosophy; for him there are no other causes than material and efficient ones, which should also be researched by philosophy.⁵⁴⁸ The priority of efficient causes in Hobbes, under which formal and final ones are now also subsumed, hangs together with the completely new function of motion within his physical-philosophical system, since motion represents the efficient cause of all qualities of bodies. Also in this respect the new theory of motion undermines traditional metaphysics.

In Hobbes' direct confrontation with this latter, first signs of a socio-political analysis of the metaphysical phenomenon appear, which goes hand in hand with the hitherto usual epistemological and linguistic one. This diversity of Hobbesian metaphysics critique results of course from the intellectual versatility of its author, but at the same time it marks the beginnings of that polemically intended connection of religion and metaphysics which became characteristic for at least one wing of the Enlightenment. Hobbes undertakes this connection not so much as a historian or sociologist, but rather as a theorist of politics who advocates the subjection of ecclesiastical power to the secular and discovers its interlacing with metaphysics in his fight against various aspects of theology. The problem of the (positive and negative) relationships between religion and politics was by no means unknown—Machiavelli had already devoted some keen pages to it, but by connecting religion and metaphysics with each other, Hobbes draws attention primarily to the political character of the latter. This means concretely that scholastic-Aristotelian metaphysics, through the doctrine of *formae substantiales* and the associated view of the soul as imperishable form of the body, is supposed to support that belief in immortality and the reward or punishment of the soul in the Hereafter which aims to deliver the conscience of men to ecclesiastical influence and thus undermine the secular state. Despite all metaphysical art of rationalization and philosophical self-importance, this belief does not differ essentially in Hobbes' eyes from popular superstition regarding the existence of ghosts etc., in which incidentally lies a reason for the origin of religion.⁵⁴⁹ The following historical process can thus be reconstructed: at the beginning certain superstitious views form, from them (with the cooperation of other factors) religion arises, and finally follows the philosophical rationalization of religion by metaphysics, whereby the religious-theological-metaphysical web serves for its part to consolidate ecclesiastical rule. The same scheme is later represented by prominent Enlighteners in various variations.

Hobbes now mobilizes language analysis to explain the way in which metaphysics makes its logically illegitimate leap from the tangible world of moving bodies to the realm of supersensible and supernatural substances. Understandably he deals in particular with the origin of the central metaphysical concepts *ens* and *essentia*, which he attributes to a false use of

⁵⁴⁸ *De corpore*, I, 10, § 7 = *Opera*, I, 121.

⁵⁴⁹ See *Leviathan*, chap. 46 in connection with chap. 12 (*Works*, III, 94 ff.).

the verb *esse*. Words in general, he writes, divide into names of things, names of our ideas of things, names of names (e.g. singular, plural, affirmation, negation, syllogism, definition) and finally names that signify the agreement or disagreement of names with each other. The copula *est* (ἐστί) belongs to this last class, for it indicates that a name can be combined with another in such a way that both can refer to the same thing. The sentence "man is a living body" does not say that man is one thing, the "living body" another and the "is" a third, but the "is" expresses only the unity of "man" and "living body", and therefore the sentence as a whole concerns only a single individual thing. In view of this function of the copula, any hypostatization of it is inadmissible—any reference to *entia* and *essentiae* without further determinations is forbidden, but also to those which are determined but independent of each other and could serve as ontological support of the names "man" or "living body"; for "humanity" (as *essentia* "of" man), "liveliness" and "corporeality" do not exist independently, but only as attributes that are ascribed to an individual thing. In languages that lack the copula, concepts like *ens* and *essentia* cannot be formed, which however does not stand in the way of the connection of subject and predicate; this proves that those concepts have no correspondence in the only real world of things. The grammatical expression of the belief in essences etc. are the abstract nouns, which the Scholastics use among other things to explain natural phenomena, whereby they offer merely empty tautologies, e.g. when they claim that heavy bodies fall because of their heaviness, which is conceived as an independent essence. The abuse of abstract nouns forms for Hobbes one of the main sources of metaphysical conceptuality. In contrast to names that refer to concrete things and were present even before the formation of sentences, abstract nouns arise within the framework of sentences and the various possibilities of connecting subject and predicate. Their use is admittedly inevitable, for without them we could research qualities only by multiplying those bodies on which the qualities in question are found; their abuse takes place when qualities are studied by abstraction from the corresponding bodies, whereby the impression arises that they constitute independent entities.⁵⁵⁰

The surest guarantee against the abuse of language and against metaphysics itself is therefore the connection of names with the corresponding individual things, even if the economy of thought dictates abbreviations and abstractions. This is what Hobbes means when he writes that language yields a sense only if the sequence of words corresponds to a sequence of ideas—but of clear and distinct ideas that refer to bodies, motions, representations or names. If this correspondence falls away, language loses its inner coherence, as is shown paradigmatically in the writings of metaphysical authors.⁵⁵¹ Since truth and error have to do with language and not

⁵⁵⁰ *Op. cit.* in connection with *De corpore*, I, 3, § 4 = *Opera*, I, 30 f.

⁵⁵¹ *De corpore*, I, 3, § 1 = *Opera*, I, 26 f. On the relationships between thought and language see esp. I, 2, §§ 3–6.

with things,⁵⁵² there is a direct connection between the form of sentences and the origin of metaphysical errors. Such errors, Hobbes thinks, stem from the violation of the fundamental rule for the formation of sentences, namely that only names can be combined with each other that refer to the same thing, regardless of whether it concerns a body, an accident, a representation or another name. Hobbes lists seven cases of false connection of names with each other and derives from them various positions of scholastic-Aristotelian metaphysics.⁵⁵³ His endeavor for the classification of names and the rules of their connection with each other shows, by the way, his intellectual debt to the nominalist tradition, in which, as we know, the distinction between names *primae et secundae intentionis* plays a considerable role:⁵⁵⁴ by it, indeed, it should be proven that universals are mere names without real ontological coverage. Hobbes seems on the contrary to owe little to the rhetorical questioning of the Humanists.

If Hobbes, on the basis of his intellectual sensibility towards the relationships between language and truth, belongs to the nominalist tradition in the broad sense, he represents on the other hand without hesitation the fundamental conviction of the modern age that nature forms a rationally structured lawful whole as the object of an equally rational objective science. But scientific certainty rests on the application of geometry in the study of the ultimate constituents of the world, i.e. bodies and their motions, and this makes the separation between primary and secondary qualities unavoidable. In fact, Hobbes distinguishes between the body and its accidents, which can change, while the body itself remains unchanged. Certain accidents, however, necessarily belong to every body, and Hobbes names as such those which are capable of geometrical treatment, i.e. extension and form. Moreover, he emphasizes that in contrast to bodies, which exist objectively or independently of our thinking, accidents constitute the way in which we perceive bodies.⁵⁵⁵ Thus here too, as already with Galileo, the question of substance arises anew and at the same time that of a secularized, mathematically and scientifically oriented metaphysics as knowledge of the "true" super-empirical reality. But while Galileo derived the mathematical form of knowledge directly from the constitution of the human intellect and thus ensured the transition from sensible qualities to the super-empirical realm of mathematical magnitudes at least theoretically, it is difficult for the sensualist Hobbes to point out concretely the path that is supposed to lead from the perception of accidents to the certain and final or mathematical knowledge of the essence of bodies. Instead of grounding the transition from appearance to essence epistemologically, Hobbes develops two parallel series, of which the former represents an inductive compilation of empirical data, while the latter represents a deductive-geometric exposition of a logically coherent world picture. Between

⁵⁵² *Op. cit.*, I, 3, § 8 = *Opera*, I, 33.

⁵⁵³ *Op. cit.*, I, 5, §§ 2 ff. = *Opera*, I, 51 ff.

⁵⁵⁴ See Ch. I, note 364, and cf. *De corpore*, I, 2, § 10 = *Opera*, I, 18 f.

⁵⁵⁵ *Op. cit.*, I, 8, §§ 1–3 = *Opera*, I, 90 ff.

these two series there is no relationship of reflection, but rather a functional one (i.e. the study of functions in one series permits more or less sure conclusions about the mode of function of the other), but the gap between them is shown on the other hand by the fact that, while our representations of things proceed from their motions in a strictly causal manner, natural-philosophical knowledge seems to come about on a purely logical level.⁵⁵⁶ Hobbes' sensualistic starting position thus finds an intellectualistic conclusion, and this permits again a positive use of Aristotelian logic, especially regarding the doctrines of definition and syllogism.⁵⁵⁷ Here too it becomes clear that Hobbes stands much closer to Nominalism than to Humanism, although it must be added that the powerful appearance of the new mathematical natural science had meanwhile created a completely new situation and made spiritual affinities or crossings with older currents practically irrelevant.

⁵⁵⁶ Polin, *Politique et Philosophie*, esp. 47 ff.; Armstrong, *Metaphysics*, 36–38, 49 f.

⁵⁵⁷ *De corpore*, I, 4 and 6, § 14 = *Opera*, I, 39 ff., 78 f.

5. The Restructuring of Metaphysics under the Influence of Mathematical Natural Science and the Primacy of Epistemology

a. General Remark

In the two preceding sections it was shown that and how the new natural science not only called into question central conceptions of traditional metaphysics, but also urged towards a substantial reinterpretation of the terms "metaphysics" and "first philosophy" so that these, if they were used in a positive sense at all, no longer meant the science of the first principles of that which is [*des Seienden*], but rather of nature or of the this-worldly; metaphysics thus became general or philosophical physics and the preposition "meta-" no longer indicated the transition from the sensible world to the sphere of the transcendent spirit, but the advance to the fundamental structures and the lawfulness of the sensible world itself, which indeed have no existence outside the same, but which on the other hand cannot be formulated if the level of immediate perception is not overcome.

Bacon had already sensed the necessity of such an overcoming, but mathematical natural science consistently grounded it through the separation between primary and secondary qualities. Since the primary qualities referred to mathematical magnitudes or relations which are not found in the realm of sensible experience, it seemed that their separation from the perceptible world of secondary qualities opened up again the old gulf between the sensible and the supersensible, the immanent and the transcendent, and made possible anew a metaphysical investigation of the problem of substance, which nevertheless had only shortly before been declared practically unimportant in comparison to the problem of function. But even if the supersensible level in the thought-world of mathematical natural science exhibited certain similarities to the Aristotelian substance in its juxtaposition to accidents, it had on the other hand not the slightest thing to do with the sphere of the transcendent spirit, which constituted the decisive component of traditional metaphysics. From the mute and impersonal realm of

mathematical magnitudes and relations, above all, those ethical and normative principles could not be derived which the representatives of traditional metaphysics drew from the sphere of the transcendent spirit, in order then to interpret them according to need and place them in the service of concrete power claims. The gulf between the sensible and the supersensible world, as it was understood by mathematical science, as well as the reinterpretation of the concept of metaphysics conditioned thereby, could hardly serve the old values and hierarchies.

In a time in which the power of the Church still substantially influenced social and intellectual developments, it was only natural that the question regarding the relationships of the sphere of the transcendent spirit to the new structure of the world and of knowledge posed itself with particular sharpness. The crisis of traditional metaphysics after the emergence of the new physics comes to light precisely in the attempt to construct a metaphysics which could both satisfy the new epistemological standards and save the socio-ethically neuralgic basic ideas of traditional metaphysics, namely God and the immortality of the soul. If we wish to recapitulate the long-term development, then we must admittedly say that this attempt was hardly successful. To the extent that the worldview of mathematical natural science prevailed, while simultaneously the historical and social sciences unfolded and theology lost its privileged position to become one discipline among many others in a pluralistic society, the defense of God and the immortal soul was also no longer undertaken in alliance with the new science, but rather in opposition to or independently of it. Although there has never been a lack of endeavors to use the results of exact science for the underpinning of theological-metaphysical positions, a main argument of the continuers of metaphysical tradition nevertheless consisted henceforth in the fact that there is a series of ultimate questions which positive or scientific thought can neither pose nor solve. These tendencies, however, manifest themselves above all in the 19th and 20th centuries. With regard to the development in the 17th century, our attention, despite Pascal, must be directed primarily to the fact that the attempts at a reconstruction of metaphysics taking into account the results and methods of mathematical physics either turn out forced or reveal the factual enforcement of the thought structures and priorities (e.g., primacy of the epistemological consideration) of the latter.

b. Descartes' Forced Metaphysics

As is well known, the position and function of metaphysics within Cartesian philosophy has been a point of contention from the beginning. Not a few commentators have considered the logical difficulties that arise in the attempt to harmonize metaphysics with the other aspects or components of Cartesian thought to be insuperable, while others saw in metaphysics not merely the necessary consequence or the self-evident crowning, but precisely the philosophical core of Descartes' system of thought. We wish to assert here that Descartes, quite apart from the

delicate question of the logical coherence between his epistemology and his metaphysics, undertook the transition from the former to the latter not under the pressure of an irresistible logical necessity, but rather under the influence of certain psychological and social factors; precisely the lack of a purely logical motivation allowed logical difficulties to arise here. This interpretation of ours becomes more understandable if one keeps certain important conceptual distinctions constantly in mind. First, a distinction must be made between genetic and logical priorities in Descartes' work. In the late phase of his intellectual development, Descartes presents both his method and his mathematical and scientific theories as necessary logical consequences of his metaphysical conceptions; this need not mean, however, that the latter precede temporally and genetically. The dualistic structure of Cartesian metaphysics was decisively influenced by Descartes' intellectualist epistemology, which in turn formed during the philosopher's early engagement with mathematics and its cognitive character. Furthermore, a distinction must be made between the fact of the structural correspondence of metaphysics and epistemology and the concern to supplement or underpin epistemology with a metaphysics; although the nature of his epistemology forced Descartes to decide in favor of a certain form of metaphysics (a materialist metaphysics, for example, was excluded from the outset), the existence of the epistemology did not in itself constitute a compelling reason for a transition to a metaphysical theory. That is to say: the drafting of a metaphysics was for Descartes the product of a particular worldview option and decision.⁵⁵⁸

This becomes clear if we think of the ideal of knowledge at which Descartes had arrived even before his turn to metaphysics, by generalizing the results of his engagement with mathematics epistemologically. In agreement with the contemporary tendencies of which we spoke in connection with Galilei, Descartes rejects *a limine* the Aristotelian (and Platonic) separation of levels of knowledge according to the hierarchy of ontological levels. Knowledge, or the logico-mathematical mode of thought, remains always the same in its structure, regardless of which object it refers to in any given case,⁵⁵⁹ and precisely this uniformity and constancy of knowledge guarantees the uniformity and constancy of the logico-mathematically structured worldview. From this follows the primacy of epistemology over ontology, since the real qualitative differences between things are dissolved in the uniformity of their apprehension by thought. The primacy of epistemology is also expressed in the view that method is the correct ordering of things, an ordering established on the basis of uniform criteria of knowledge and not, for instance, with regard to the respective nature of the objects of knowledge.⁵⁶⁰ If nature is grasped and depicted by means of such a method, it contains no substances in the traditional

⁵⁵⁸ Kondylis, *Aufklärung*, 175–177, 179 (with references).

⁵⁵⁹ See the emphatic formulation in *Entretien avec Burman* = AT, V, 176.

⁵⁶⁰ Summarizing this McRae, *Unity of Science*, 34 ff.

sense of the word (*entia philosophica*, as Descartes expresses himself),⁵⁶¹ but is subsumed under the common denominator of extension and thus unified, which permits its purely mathematical treatment as well as its apprehension as a sum (not of substances, but) of functions.⁵⁶² Within the framework of homogeneous and unified knowledge, of which the new worldview is both product and reflection, there are no qualitatively superior truths; the theses which later acquire a higher or metaphysical status in Descartes initially appear in an equal position alongside the mathematical etc. truths of the *mathesis universalis*.⁵⁶³ the main characteristic of this latter consists precisely in the fact that every single cognition, regardless of its particular weight, can only be what it is through its participation in the system of knowledge. Thus, on the level of knowledge, just as on the level of nature, function and relation are decisive.

In purely logical terms, nothing could prevent Descartes from remaining with the knowledge ideal of the *mathesis universalis* and devoting himself otherwise to the question of method and its mathematical and scientific applications, adopting an agnostic position vis-à-vis traditional metaphysics or aligning divine and human knowledge through the mediation of mathematics—just as Galilei had done. But for reasons which we shall yet discuss, Descartes decides in favor of supplementing his epistemology with a metaphysics, and moreover he claims that this supplementation is commanded not by mere piety, but (also) by internal epistemological necessities, such as the ultimate grounding of the principles of science and the real (not merely logical) truth of mathematico-scientific statements. Here the question naturally arises to what extent such a grounding was necessary at all. What concrete inadequacies and weaknesses of Cartesian epistemology, as it was initially formulated without recourse to metaphysical questions, urged the conclusion that only with the help of metaphysics could knowledge become truly universal and reliable? This question, which should actually be self-evident, is however not posed by Descartes at all, which is why his argumentation is characterized by unclarities, recantations, and tautologies. It is expected that absolute certainty will result from the final elimination of radical doubt—but this doubt appears completely abruptly, and indeed via the detour of the assumption of the *genius malignus*, whose games could turn even that which is quite certain for us, such as mathematical truths, into deception.⁵⁶⁴ In order to arrive at his radical doubt without leaps, Descartes would have had to point to concrete cases in which even correctly applied mathematics had led to false conclusions—he pointed to concrete cases, at any rate, when he wanted to prove the deceptiveness of the senses. But if mathematics has never yet deceived us, as the senses have, then it is difficult to see why we should come to the thought at all that it could be unreliable in itself. Why must we surmise

⁵⁶¹ *Regulae*, XIV = AT, X, 442.

⁵⁶² Cf. Rombach, *Substanz*, I, esp. 416 f.

⁵⁶³ See e.g. *Regulae*, X = AT, X, 421 f.

⁵⁶⁴ *Medit.* I = AT, VII, 20 ff.

that the *genius malignus* renders even mathematics unreliable, and not conversely assume, as Galilei for instance did, that in view of the absolute reliability of mathematics, divine thought is also mathematically structured, that is, simply identifies itself with mathematical truths and does not posit them voluntaristically? In order to emphasize the superiority of the metaphysical level over the epistemological and at the same time to undermine intellectualist scholastic theology, Descartes had indeed claimed that mathematical truths do not exist in themselves, but are established by God—but at the same moment he deprived this thesis of its point by adding that those truths are in themselves necessary, although God did not create them under the pressure of any logical necessity.⁵⁶⁵

Descartes himself renders the necessity of the hypothesis of the *genius malignus* problematic when he opines that nothing can shake a clear and distinct cognition, such as that of one's own ego or of mathematical truths, nor does anything force us to assume the existence of an evil God who plays his game with us; to the extent that the doubt regarding the certainty of clear and distinct cognitions stems from such an assumption, it is "very weak and, so to speak, metaphysical."⁵⁶⁶ The expression "metaphysical doubt" is used here rather pejoratively, i.e., to designate something that has no direct practical relevance. Furthermore, Descartes believes he could prove the existence of God with the same certainty as he had previously been able to prove mathematical truths.⁵⁶⁷ But if the certainty of the existence of God is exactly as great as mathematical certainty, then it must be specifically explained why the former is to be regarded as superior—and indeed as capable of grounding the latter. How can God be more certain than that which is already absolutely certain?⁵⁶⁸ Not an immanent logical necessity, but a decision based on other motives thus drove Descartes to call mathematical certainty (provisionally) into doubt, in order (provisionally) to enable himself to seek the ultimate guarantees for the

⁵⁶⁵ Letters to Mersenne of April 15, May 6, and May 27, 1630 = AT, I, 145, 149 f., 152. Cf. the letter to [Mesland] of May 2, 1644 = AT, IV, 118 f., and *Sext. Resp.* = AT, VII, 435 f.

⁵⁶⁶ *Medit.* III = AT, VII, 36 (*valde tenuis et, ut ita loquar, Metaphysica dubitandi ratio*).

⁵⁶⁷ *Medit.* V = AT, VII, 65 f.

⁵⁶⁸ The question is posed by Jaspers (*Descartes*, 30), who sees in Descartes' theological-metaphysical undertaking a (logically untenable) attempt to surpass scientific certainty by the superior existential one. Gassendi had already noted that Descartes' mathematical certainty or his certainty about his own existence preceded the certainty about God, and also that God, although he might exist as Creator and guarantor of truth, is nevertheless less convincing as a scientific argument than mathematical demonstration, since all must believe in the latter, while not all believe in God; the appeal to him can therefore only be understood as a pious act (*Quintae Object.* = AT, VII, 326–328). Descartes' reply to this is quite superficial: he wastes no words on Gassendi's central objection that certainty about one's own existence precedes certainty about God (we will return to this), and refers to skeptics who, besides certainty about God, also deny the certainty of mathematics (*Quintae Resp.* = AT, VII, 384). This statement, however, proves nothing about the relationship between mathematical certainty and the existence of God.

reliability of knowledge in metaphysics or in God.⁵⁶⁹ Descartes' endeavor to underpin methodological, cognitive, and mathematical certainties by means other than purely epistemological rooted, in other words, in his personal desire to take metaphysics, specifically in the form of theo-logy, seriously (also) philosophically and to grant it a central place in his system of thought. Whether metaphysics constitutes the final instance in the question of the certainty of knowledge or not is a worldview option and decision, not a "rational" judgment, since it can just as well be asserted that the final instance here is, for example, mathematics or intuition. Before Descartes ventured the transition from epistemology to metaphysics, he should therefore have shown for what reason metaphysics constitutes the final instance in the question of the certainty of knowledge. He did not do so because his decision to give his own epistemological thought a metaphysical dimension or grounding was already fixed.

The impression that the original Cartesian epistemology was subsequently framed with metaphysical conceptions is reinforced by the fact that the mandate to God to guarantee the certainty of knowledge hardly influences mathematical and scientific work itself—just as the free establishment of truths by the divine will changes nothing regarding their binding nature for the human intellect. As the guarantor of ultimate certainty of knowledge, God incidentally does not vouch for the logical validity of the various axioms and propositions, but only for their reality, their real validity in the world; God vouches for the reality of correct thoughts, not for the correctness of all thoughts.⁵⁷⁰ He therefore contributes nothing to the development of science as coherent logical thought and procedure; since He cannot deceive human beings, His intervention in science would have the consequence that no science and no scientist could err, which is notoriously by no means the case. As Descartes explains, we must not, if we wish to establish a true science, rely on God's grace, but regard divine goodness as the guarantee for the objective truth of our correct scientific ideas, in order then to proceed on the basis of those clear

⁵⁶⁹ Cf. Liard, *Descartes*, 144 f. Based on this observation Liard thinks one could simply delete Descartes' metaphysics without the other aspects of his work being affected (141).

⁵⁷⁰ Alquié commits a serious misunderstanding when he writes that Descartes resorted to metaphysics because ideas as a mere product of the ego would result in a false science (*Descartes*, 101). If this were true, the need for a metaphysics would indeed be much stronger, and this is precisely what Alquié wants to suggest, who incidentally simply ignores the question of the logical coherence of Cartesianism and contents himself with the existentialistically inspired assertion that Cartesian metaphysics is not a "system", but a reaction of the whole human consciousness against an objective system, an elevation of consciousness to Being as its source etc. (*op. cit.*, 109 f.). In contrast to him, Fleischer duly appreciates the distinction between truth and reality in its relation to the metaphysical problem, and furthermore she demonstrates the existence of two different models in Descartes' thought, i.e., an earlier non-metaphysical and a later metaphysical one, whereby the philosopher inclines towards the former, although he finally decides for the latter (*Krise*, esp. 42 f.). Nevertheless, Fleischer seems to assume that the transition from the earlier thought model to the later one was the result of a logical necessity, although it is emphasized on the other hand that the reality of the Cartesian self-conscious ego, in which thought and existence coincide, required no additional metaphysical justification (see below).

and distinct (thus correct) ideas which we had arrived at even before attaining the divine guarantee, without henceforth worrying about the question of certainty.⁵⁷¹ Since God's intervention takes place on a level which is not that of the logical explication of clear and distinct ideas, the latter could also take place without any recourse to God, that is, quite independently of whether our ideas deal with appearances and dreams or with realities; as Descartes himself writes, the evidence and validity of ideas are identical in dreaming and in waking.⁵⁷²

The non-interference of God in the actual cognitive process thus makes the divine guarantee for the reality of (correct) knowledge into a rather academic matter. Furthermore, that guarantee appears extremely precarious if we consider that it rests on the assumption of the goodness of God, which does not permit Him to deceive us. For the question of whether God deceives us or not is naive. If an omnipotent and at the same time evil God wanted to deceive us, he would give us no possibility of finding it out, since it would not be in his interest to deceive us and at the same time let us know about it; were we capable of finding it out, this would mean that we can recognize the truth and free ourselves from error, whereby we would thwart the plans of the evil God and annul his omnipotence. The most effective way in which a *malignus genius* could deceive us would even be to reassure us regarding the question of ultimate certainty and make us believe (as Descartes believes) that he, as God, can only be good and truth-loving. But how can we know that this belief is suggested to us by a good God, if the omnipotence of an evil God would in any case prevent us from learning what he did not want to let us recognize? The aporia can, however, also be formulated conversely: why did the good and truth-loving God not also make our senses entirely reliable, instead of guaranteeing only the real validity of clear and distinct ideas? As we know,⁵⁷³ the representatives of scholastic-Aristotelian philosophy had to fight very often even before the 17th century, but also in it, against the skeptics' mistrust of the reliability of the senses, and they did so by appealing to the goodness and love of truth of the Creator. Descartes also acknowledges the necessity of a divine guarantee for the certainty of knowledge, but he does not relate the same to the senses—apparently because his mathematical education had given his epistemology an intellectualist orientation from the start. But precisely this circumstance shows that the sphere of action of divine love of truth was determined not by God himself, but by Cartesian epistemology. In this respect too, therefore, the recourse to God appears forced and logically unjustified.

In light of these observations, the hypothesis would be quite sensible that Descartes could build, on the basis of the certainty of the *cogito ergo sum*, which not even the *genius malignus* is able to

⁵⁷¹ *Medit.* V = AT, IX, 55 f.; cf. *Quatr. Resp.*, in the same volume, p. 190.

⁵⁷² *Op. cit.*, 56.

⁵⁷³ See Ch. I, Sect. 3, and Sect. 2 in this chapter.

shake,⁵⁷⁴ a categorial and axiomatic system which, to be sure, would have hardly any commonalities with traditional metaphysics, but would indeed deserve to be apostrophized as "first philosophy" or "metaphysics," specifically in the sense in which Bacon, Hobbes, or Boyle used these terms in the 17th century. This system would represent a philosophical deepening of early Cartesian epistemology, wherein the new primacy of epistemology, as it was reflected in the *cogito*, would serve as a point of departure and gradually assume the form of a modern philosophy of consciousness, which might have anticipated some insights of the early Fichte; the concept of the *cogito* in its connection with the concept of being or existence could thus be explicated such that it would guarantee the certainty of everything that radical doubt had shaken, even if Descartes, like later Fichte, had had to regard the world of consciousness or of the *cogito* as the only (philosophically relevant) reality. Instead of exploiting philosophically his discovery that in the *cogito ergo sum* subject and object of knowledge or idea and existence coincided, Descartes abruptly strikes another path, and he even obscures the meaning of the mentioned discovery in his attempt to underpin the existence of God through the ontological proof. As is known, this proof rested on the thesis that only in the case of God does the knowledge of certain properties of a substance permit the inference of its actual existence; the property of perfection belongs to God self-evidently, and since nothing can be perfect if it does not exist, God as substance must also exist without further ado. This implies that in no other case can the knowledge of certain properties of a substance guarantee its existence. How then can the real existence be proven of that substance whose property known to us is thought? How can we know with certainty that the *ego cogito* must imply the *ego sum* or *existo*, if Descartes bases this inference on the thesis that the property of thought can only stand in connection with a thinking substance?⁵⁷⁵ If, on the other hand, it holds fundamentally that there can be no properties without reference to the corresponding substances, then this must be the case both for the *cogito* and for mathematical truths: but then the securing of their reality through the recourse to God would be superfluous.⁵⁷⁶

The willed transition from secular epistemology to theologically stamped metaphysics also causes other inconsistencies in Descartes' argumentation; most discussed, even during the philosopher's lifetime, was that which consists in the fact that God is first proven by means of the criterion of clear and distinct ideas, in order then, through his existence thus proven, to vouch for the truth of the named ideas. Connected with this is the fact that the concept of radical doubt, which Descartes wants to take as the starting point of his path to unshakable certainty, necessarily becomes ambiguous: on the one hand it refers to existence in general, and then both the *cogito* and the *regula generalis* of clear and distinct ideas are held against it; on the

⁵⁷⁴ *Medit.* II = AT, VII, 25.

⁵⁷⁵ *Princ. Philos.*, I, § 11 = AT, VIII, 8.

⁵⁷⁶ Cf. Kenny, *Descartes*, 169 ff.

other hand, however, it concerns this latter *regula*, and then it is supposed to be refuted by the *deus verax*. In order to introduce the desired idea of God, Descartes must therefore turn the concept of radical doubt on its head, i.e., use it one time by means of the rule of clear and distinct ideas and combat it the other time against this same rule. It would nevertheless be unjust to reproach⁵⁷⁷ Descartes for reversing his argumentation also in the discussion of the question of error, by initially, in order to be able to introduce the idea of God, presenting error as so grave a phenomenon that it could only arise from the machinations of an omnipotent and evil God, while subsequently, after he has discovered the goodness and truth-loving nature of God, acquitting Him of all guilt and conceiving error as a purely human affair, i.e., as a violation of the *regula generalis* by a free but unrestrained will. The reason why Descartes commits no logical error in this case becomes obvious when we recall the distinction between truth and reality of ideas. The question with regard to the *genius malignus* is not whether he whispers false solutions to us in the treatment of specific scientific or philosophical questions, but whether he withdraws objective validity from the (in themselves correct) clear and distinct ideas; the flawless application of the *regula generalis* as such remains a purely human affair. We are dealing here, therefore, with two different concepts of error, and consequently there is no argumentative *volte-face*.

Undoubtedly, Descartes' metaphysical design displaced the original ideal of the *mathesis universalis*,⁵⁷⁸ since thereby not only was a deepening of the latter in the sense indicated above prevented, but also physics—in strange agreement with scholastic priorities—was presented as an appendage or outflow of metaphysical basic positions. The original components of Cartesian thought, grown together with the problems of mathematical natural science, are however not suppressed. On the contrary, Cartesian metaphysics appropriates essential ideas of the *mathesis universalis*, while at the same time it sees itself forced to coexist with the primacy of epistemology, which Descartes advocates from the early phase of his intellectual development and also later,⁵⁷⁹ truth thereby loses its ontological aspect, which came to expression in its scholastic definition as *adaequatio rei et intellectus*, and becomes a purely cognitive matter, i.e., clear and distinct knowledge. From the interaction of all these factors and motives results a mixture of epistemology and metaphysics which characterizes many philosophical constructions of the 17th century and constitutes a typical transitional phenomenon. In Descartes, to be sure, the metaphysical magnitudes remain in themselves autonomous and paramount, yet they fulfill functions which stem not from their own nature but from epistemological needs and purposes; thereby traditional priorities are reversed, although they appear outwardly intact. In Descartes' late works, which set forth his metaphysics, the order of

⁵⁷⁷ As Kenny does, *op. cit.*, 194.

⁵⁷⁸ Rombach, *Substanz*, I, 435 ff., 487 ff.

⁵⁷⁹ See e.g. *Regulae*, XII = AT, X, 418.

knowledge is followed; the question of the being as being or of substance constitutes neither the starting point nor the axis of the philosophical investigation, and God or the soul are (at least primarily) not "kinds of being" in the scholastic sense, but what interests primarily is their function within the methodical definition of general principles of knowledge. Not by chance, therefore, is the first part of the *Principia philosophica* called: *De principiis cognitionis humanae*.⁵⁸⁰

Particularly characteristic is the use of the first and fundamental metaphysical concept, i.e., the concept of God. The fact alone that the *genius malignus* cannot overturn the certainty of the *cogito* indicates the new status of epistemological criteria. Not even the omnipotence of the supernatural is capable of shaking human self-consciousness: this means that the primacy of epistemology goes hand in hand, at least indirectly, with a new evaluation of human autonomy and freedom. Furthermore, the concept of God is not simply taken over from traditional theology, but it forms under the pressure of a doubt which intends to be radical and absolute, and indeed it forms as a clear and distinct idea of the human intellect and thus is subject to the general criteria of the certainty of knowledge.⁵⁸¹ But quite apart from the manner and logical legitimation of its emergence, the idea of God is affirmed not with the intention of bringing the various beings or being in its totality under its protection, but so that it guarantees the objective validity of correct ideas and the unhindered unfolding of the process of knowledge, in which, moreover, as already stated, God does not intervene. In this sense God means nothing other than the possibility, the truth, and the firmness of knowledge—and conversely: the highest and final knowledge, the *res cogitans* in its entire purity is nothing other than God himself. Precisely at the time when Descartes was drafting his metaphysics, he clearly expressed its detachment from traditional metaphysical problems and its binding to the epistemological questioning of consciousness. We must distinguish, he wrote at that time, between proper or revealed theology and metaphysical theology (in his sense), which the human intellect investigates with the double purpose of knowing itself and God; significantly, mention is made subsequently of a proof of metaphysical truths which would be even more evident than geometric proofs.⁵⁸²

If Cartesian metaphysics was unable to eliminate the new primacy of epistemology, it could just as little change the structure of mathematical physics; on the contrary, in its sought-after interweaving with this, it had to make allowances which did not remain without consequences for its own character. As already noted,⁵⁸³ God was conceived, after the formation of the worldview of mathematical natural science, according to the functions which he had to fulfill by mandate of the now decisive natural lawfulness, whereby he was transformed at bottom into a

⁵⁸⁰ Heimsoeth, *Descartes' Methode*, 56 ff.

⁵⁸¹ Cf. Krüger, *Herkunft*, esp. 246, 250 f.

⁵⁸² Letter to Mersenne of April 15, 1630 = AT, I, 144; cf. what Descartes writes about revealed faith in *Regulae*, III = AT, X, 370.

⁵⁸³ See Sect. 1 in this chapter.

factotum, although he still seemed to enjoy the old omnipotence. Descartes moves in the same direction when he places the laws of motion in connection with the character of God.⁵⁸⁴ The interweaving of scientific and metaphysical questioning—for all the nominal priority of the latter—has, however, another consequence as well: the mathematico-scientific magnitudes become—just like the psychologico-epistemological ones—gradually and imperceptibly an organic component of metaphysics, so that the latter loses its inner coherence and homogeneity, only then to disintegrate completely. The later tripartite division of the *metaphysica specialis* into theology, psychology, and cosmology is foreshadowed in the Cartesian distinction of the three substances (God, *res cogitans*, *res extensa*).⁵⁸⁵

Although the transition from the mathematically oriented ideal of the *mathesis universalis* to metaphysics was by no means logically compelling, the character of the latter nevertheless had to let itself be influenced by the structure of the former, which had been worked out earlier and remained valid. The central distinction of Cartesian metaphysics between *res cogitans* and *res extensa* is prepared in the transition from general to pure mathematics, which Descartes had already carried out in his pre-metaphysical phase when he formulated his method. The identification of the self-conscious ego with a thinking spirit, which is entirely independent of the extended body, is undertaken for the first time in the discussion of the possibility of a liberation of mathematics from everything sensible and material,⁵⁸⁶ and it constitutes the ontological projection or reflection of a mathematics which operates exclusively in the sphere of pure ideas of pure thought.⁵⁸⁷ But also the ontological proof of God, as it appears in the concrete context of Cartesian thought (thus independently of its prehistory), represents an extension of mathematical intellectualism in an ontological direction; seen in this way, it is admittedly symptomatic that Descartes, before he enters more closely into the ontological proof of God, and as it were as an introduction thereto, discusses once again the special nature of mathematical knowledge.⁵⁸⁸ Finally, it must be noted that mathematics offers Descartes a logical legitimation for the transition to metaphysics as the final cognitive instance, however paradoxical this may sound. As a mathematician, Descartes comes namely to the conclusion that deductive knowledge is the most certain,⁵⁸⁹ and precisely from this he derives the logical

⁵⁸⁴ *Le Monde* = AT, XI, 38–45; *Principia*, II, §§ 36–42 = AT, VIII, 61–66.

⁵⁸⁵ Vollrath, *Gliederung*, 280 f.; cf. Sect. 6 in this chapter.

⁵⁸⁶ *Regulae*, XII = AT, X, 422.

⁵⁸⁷ Vuillemin, *Mathématiques*, 139 f., cf. 166; already Brunschvicg, *Mathématique*, 286, 288, 292 f., 297.

Although Brunschvicg correctly describes the structural determination of Cartesian metaphysics by the ideal of pure mathematics, he commits the error of regarding this determination as proof of the logical necessity of the transition from pure mathematics to metaphysics. In this way he wants to refute freely Gilson's thesis of Descartes' influencing by Scholasticism.

⁵⁸⁸ *Medit.* V = AT, VII, 64 ff.

⁵⁸⁹ *Regulae*, II = AT, X, 365.

right to turn to metaphysics as knowledge of those most general and ultimate principles from which an absolutely firm deduction must proceed.⁵⁹⁰ Thereby the impression arises that the inner logic of the mathematically inspired and grounded Cartesian method itself must dictate the overcoming of mathematics, even pure mathematics, by metaphysics.⁵⁹¹ What Descartes does not sufficiently substantiate, however, is, as already stated, the view that metaphysics constitutes in fact, and not merely on the level of tautological fictions, the highest cognitive instance.

The general ambivalence of Cartesian thought makes itself felt also in the treatment of the problem of substance. This problem poses itself automatically from the moment in which Descartes, following Galilei's groundbreaking insights, adopts the distinction between primary and secondary qualities.⁵⁹² The turn to metaphysics, however, effects a shift of interest here. When substance is spoken of now, the interest is not always and not exclusively the relationship of the sensible changeable properties to the underlying fixed intelligible mathematical magnitudes, but just as much, and perhaps even more, the underpinning of the sharp separation between spirit and matter or thought and extension. The problematics of the *cogito* and of self-consciousness (quite alien to Galilei) admittedly made a special sensitivity in this regard unavoidable; the defense of the existence of God and the immortality of the soul lends that separation, however, a completely new depth and meaning. On the other hand, it is the case that precisely the emphatic separation of thought and extension as distinct substances gathers all beings around two poles, whereby ontology is drastically simplified; the renunciation of the investigation of the being as being contributes for its part also to the elimination of the traditional hierarchy of substances culminating in Being. It is therefore understandable why Descartes does not accept the scholastic conception of universals⁵⁹³ and why he emphasizes that substance cannot be recognized immediately and in itself, but only through accidents.⁵⁹⁴ It would be wrong, however, to think that Descartes understood the transition from accidents to substance similarly to the Scholastics; for those accidents which can lead to the apprehension of substance are not empirical determinations which are merely placed side by side summarily, but must themselves constitute clear and distinct ideas in our thought. Precisely for this reason it also appears possible to determine a substance on the basis of a single accident (thus matter on the basis of extension and spirit on the basis of thought).

The psychological and sociological reasons must still be mentioned which moved Descartes to crown his original, mathematically and scientifically inspired ideal of the universal method or

⁵⁹⁰ *Princip. Philos.*, I, §§ 5, 13 = AT, VIII, 6, 9 f.; cf. *Sec. and Quint. Resp.* = AT, VII, 141, 384.

⁵⁹¹ Kondylis, *Aufklärung*, 180 f.

⁵⁹² *Medit. II* = AT, VII, 29 ff.

⁵⁹³ *Quint. Resp.* = AT, VII, 380.

⁵⁹⁴ *Tert. and Quart. Resp.* = AT, VII, 185, 173; cf. the analysis by Brunschvicg, *Spinoza*, 156 ff., esp. 162.

the *mathesis universalis* with a metaphysics and thereby to accept the logical leaps of which we have spoken. The relationships of the Jesuit pupil Descartes to scholastic thought were much more intense, personal, and complicated than Galilei's, for example. Therefore Descartes is not content to reject Scholasticism *in toto* and to place the entire philosophical questioning on a modern basis, but is anxious to enrich his epistemological and mathematico-scientific theories with those moments which, as he hoped, would bring about a reconciliation with his former teachers and procure for his work an unhindered and broader effect. If he professes the scholastic unity of physics and metaphysics, whereby he admittedly radically changes the sense and content of this unity, he does so in order to enable himself to oppose the all-sided philosophical-theological construction of Scholasticism with an equally complete edifice of thought, which would be suited not merely to eliminate the scholastic construction, but also to take over all its cognitive and normative functions and thereby find general approval. Therefore Descartes presents the principle of his metaphysics, i.e., the sharp dualism of spirit and matter, as the best possible safeguarding of God and the immortality of the soul or as the most effective polemic against atheism and materialism. In this perspective he considered also his mechanistic physics, which rested on the identity of matter and extension, as alone capable of satisfying the requirements of modern natural science and simultaneously leading the fight against the increasingly strong anti-religious currents successfully. Descartes believes, therefore, that he can satisfy the most diverse, i.e., modernist and traditionalist concerns and expectations with one stroke and thus secure the applause of all sides for his all-sided theory. The failure of his plan was, however, established from the outset. His epistemology, his method, and also his philosophy of the *cogito* constituted indeed a significant processing and generalization of contemporary mathematical natural science; his metaphysics, however, is notwithstanding its structural influencing by precisely these motives at bottom a bow to the persistingly great social power of theology. The historical result of this ambivalence of Cartesianism was that it could captivate neither the Scholastics nor inspire the Enlighteners. Instead of the solicited general approval, Descartes attained the rejection or the mistrust of all parties.⁵⁹⁵

c. The Logic of Port-Royal and its Relation to Metaphysics

The discussion of the logical work of Arnauld and Nicole within the framework of this chapter might appear inappropriate, since the two authors, unlike Descartes or Malebranche, for example, undertake no attempt at a new grounding of metaphysics under the intentional or unintentional consideration of modern scientific and epistemological tendencies. Their metaphysical background remains, on the contrary, rather conventional, i.e., it consists in the fideistic agnosticism of the Augustinian tradition, as passages from the *Logique* itself⁵⁹⁶ and from

⁵⁹⁵ Detailed on this Kondylis, *Aufklärung*, 179 ff., 191 ff., 248 ff.

⁵⁹⁶ IV, 12 = pp. 335–338.

other works of theirs⁵⁹⁷ testify. Metaphysics as rational knowledge on a logical basis is thus excluded from the outset; there are things which we cannot know, although we are convinced of their existence, and therefore it appears advisable to concentrate our powers on that which is capable of perfection according to human criteria.⁵⁹⁸ Nevertheless, a brief mention of this work, whose influence around 1700 was considerable, belongs in this context, for two reasons. First, the undertaking of a systematic and useful exposition of the new epistemological principles without a parallel attempt at a new grounding of metaphysics shows that the new epistemology now formed an independent discipline, or that metaphysics was no longer supposed to or able to encompass everything principal. And secondly, even to the extent that the *Logique* deals with questions which already appeared in the subject area of traditional metaphysics, this occurs from the perspective of the new epistemological and gnosiological problems, specifically in such a way that the priority of the latter is guaranteed.

As the authors of the *Logique* communicate, they considered it inappropriate to treat in their work certain subjects which belonged to the usual content of the (scholastic) logical handbooks then still disseminated, such as the *universalia a parte rei*, which had more to do with metaphysics than with logic. Nevertheless, they explain, this separation was not strictly maintained; all useful material was taken into account regardless of its origin.⁵⁹⁹ All the same, the mixture of logic and metaphysics, as we encounter it in part still in the *Logique*, constitutes no mere scholastic remnant. The authors feel obliged to confirm, even in this their logical work, certain metaphysical conceptions with tangible theological consequences, such as the sharp separation of soul and body, from which the immortality of the former is then derived. At the same time, however, this separation appears in closest connection with the problem of the origin and nature of ideas, whereby the end result consists in a Cartesianizing amalgamation of metaphysics and epistemology. The most important objects of metaphysics are accordingly (in order): the origin of our ideas, the separation of the ideas of the intellect from material images, and finally the separation of the (immortal) soul and body from one another.⁶⁰⁰ The epistemological character of the first two questions is obvious, and yet they are unhesitatingly assigned to metaphysics. This demonstrates that, following the terminological revolution initiated by Bacon, the concept of metaphysics increasingly acquires epistemological and gnosiological significance and that this tendency is only reinforced by the mixing of epistemological and metaphysical questions, as becomes common in the 17th century in the succession of Descartes. Also traceable to Bacon is another essential characteristic of the *Logique*, namely the arrangement of its content on the basis of the various functions of the mind, i.e.,

⁵⁹⁷ See above all writings by Nicole such as e.g. *De la faiblesse de l'homme*, ch. VII–IX = *Oeuvres*, 83 ff.

⁵⁹⁸ *Logique*, IV, 1 = p. 296.

⁵⁹⁹ *Op. cit.*, 24 f.; cf. 320–322.

⁶⁰⁰ *Op. cit.*, 30.

perception, judgment, reasoning, and ordering.⁶⁰¹ The task of logic is said to be not merely the correct use of thought and the avoidance of errors, but beyond that the better knowledge of the nature of our mind through the investigation of its activities.⁶⁰²

With regard to questions of which mention has already been made,⁶⁰³ the *Logique* deserves mention because it makes clear that, especially after the methodological revolution which accompanied the rise of mathematical natural science, the humanistic critique of Aristotelian logic was historically obsolete. This meant, to be sure, no rehabilitation of the latter,⁶⁰⁴ but only increasing indifference towards that which the humanists opposed to it, namely rhetoric and the doctrine of topoi. The authors of the *Logique* likewise doubt that the topoi could provide the best method for the invention (*inventio*), if not indeed for the classification, of material.⁶⁰⁵ This doubt is the consequence of a more general transformation of interests and evaluations. For from the perspective of the new epistemology and methodology, language as the carrier and crystallization of social intercourse plays an insignificant role, and accordingly rhetoric is also pushed aside. From the moment in which the *ars inveniendi* pushes the *ars communicandi* to the margin, the intertwining of logic with the didactic art also ceases, and logic transforms itself finally and exclusively into a method of thought (or *art de penser*, as the subtitle of the *Logique* reads). It is obvious that this re-evaluation of logic was directed not only against the scholastic conception, but also against that of Ramus.⁶⁰⁶

d. Geulincx and the Transfer of the Cartesian Primacy of Epistemology to the Realm of Ontology

Some fundamental theses of Geulincx are particularly interesting and characteristic of the general philosophical tendencies with which we are dealing here. By partly adopting and partly modifying Cartesian conceptions, Geulincx arranges the traditional objects of metaphysics into a framework of thought which stands as a whole under the sign of the primacy of epistemology; freely following Bacon, he also uses the term "metaphysics" to proclaim this same primacy as well as the unification of various branches and levels of knowledge under the aegis of the same basic principles. Precisely with the intention of contrasting the old and the new concept of

⁶⁰¹ *Op. cit.*, 37.

⁶⁰² *Op. cit.*, 38.

⁶⁰³ See Ch. I, Sect. 4, and Sect. 3 in this chapter.

⁶⁰⁴ The *Logique* discusses the categories and universals, but such discussions are considered neither particularly productive nor useful; only the real correspondences of logical quantities appear important and interesting (see pp. 51, 64).

⁶⁰⁵ III, 17 = p. 233. Significantly, the Aristotelian theory of the four causes is presented here as part of the general doctrine of the Topoi (III, 18 = p. 238), which is therefore supposed to include all sorts of useless things.

⁶⁰⁶ See on this Howell, *Logic and Rhetoric*, esp. 346 ff., 354 ff.

metaphysics, Geulincx divides his "Metaphysica" into two main parts and calls the first of them "*metaphysica vera*," but the second "*metaphysica ad mentem peripateticam*." Once the difference between the two types of metaphysics is established, the question arises how the former relates to the other sciences and their common basic principles. Geulincx does not wish to restrict the concept of metaphysics to the general principles of the sciences, but designates as "metaphysics" the entire web of the *prima scientia* with the others, within which these harmonize logically with the former.⁶⁰⁷ The term "first science" constitutes, to be sure, a modified adoption of the Aristotelian "first philosophy" (of which Bacon and Hobbes, as we know, had made a similar use) and is intended to indicate the fundamental answers to the very first questions with which everyone sees himself confronted who is just entering the realm of knowledge. The "first science" thus stands, as Geulincx writes, at the threshold of the "true" metaphysics and prepares the entrance into its territory. But what are the questions which pose themselves at the very first step on the path of knowledge? It concerns primarily the two questions regarding the nature of the subject of knowledge (even before this subject comes into possession of concrete knowledge) and regarding the nature of knowledge itself, that is, regarding the character of the direct intuitive apprehension of things (*evidens intuitus*) and regarding the relationships between intellect and senses.⁶⁰⁸ Geulincx's "first science" is thus oriented purely epistemologically.

The interweaving of the remaining sciences with the first is, however, so close that the synonymy of the terms "metaphysics" and "first science" suggests itself: for "metaphysics" means indeed the entire web of the sciences, but on the other hand this web is saturated from one end to the other by the epistemological principles of the "first science," and therefore the spheres of competence of "metaphysics" and "first science" coincide. To paraphrase Geulincx: metaphysics exists where the coherence of the first science with the rest is seamless and complete; in this area, therefore, a distinction between metaphysics and first science appears impossible, if a distinction between this latter and the remaining sciences is likewise impossible.⁶⁰⁹ Such a distinction can, moreover, be made in two ways. The first is the *excursus*, i.e., the formation of a relatively independent corpus of cognitions around a pole which stands in direct connection with the "first science." Such *excursus* are, for instance, mathematics and logic, in which the deviation from the purely metaphysical (in Geulincx's sense) ideal of knowledge still remains minimal. A considerably greater gap between the first science and the others is caused by the *miscella*, i.e., the mixture of science with hypothesis or of what we know with what we ignore, as makes itself felt in the realm of theology, law, or physics, where authority, conjecture, or mere experience predominate.⁶¹⁰

⁶⁰⁷ *Metaphysica vera*, Intr., Sect. I, § 1 = *Opera*, II, 139.

⁶⁰⁸ *Op. cit.*, Sect. II, §§ 1, 12–16 = *Opera*, II, 140, 142–144.

⁶⁰⁹ *Op. cit.*, Sect. I, § 2 = *Opera*, II, 139.

⁶¹⁰ *Op. cit.*, §§ 4–6 = *Opera*, II, 139, 266 (Annot.).

The primacy of epistemology is also shown in the arrangement of the *metaphysica vera*. Its first part investigates the subject of knowledge, i.e., the human cognitive faculties (*De me ipso sive* ΑΥΤΟΛΟΓΙΑ), the second deals with natural bodies (*De corpore sive* ΣΩΜΑΤΟΛΟΓΙΑ), the third is dedicated to God (*De deo sive* ΘΕΟΛΟΓΙΑ). The starting point of the first is the *cogito ergo sum*, while the second contains an exposition of the principles of Cartesian physics. It is not the quality or originality of their content that makes these two parts remarkable, but exclusively their subsumption under the general title "Metaphysics"—which indicates the radical and unavoidable reorientation of the latter under the influence of the primacy of epistemology and the questions of mathematical natural science. In the course of this reorientation, as we shall yet see,⁶¹¹ a *metaphysica specialis* forms in distinction to the *metaphysica generalis*. Geulincx appears in any case much more radical than Descartes and the later advocates of a tripartite *metaphysica specialis* concerning the place which he grants to theology within the *metaphysica vera*. Epistemology and physics proceed from unambiguous definitions and develop their principles and conclusions *a priori*, while theology must ground its own object of knowledge *a posteriori* and can only reach it after it has appropriated the knowledge of the mechanisms of the *cogito*.⁶¹² This implies, to be sure, a factual reduction of the degree of certainty of theology and of theology in general, although this reduction hides behind the fideistic thesis that, because of the weakness of our intellect, it is advisable to begin the study of God with his attributes and not with his idea, although a deductive procedure would have corresponded most closely to the pure philosophical ideal.⁶¹³

Geulincx's substantial deviation from Descartes regarding the epistemological assessment of theology is connected with his positive attitude towards (secularized) nominalist positions. Unlike Descartes, Geulincx does not believe in the intellectual apprehension of substance and treats the question of error without the admixture of metaphysical viewpoints,⁶¹⁴ but rather following the older anti-scholastic argumentation. The fight against Scholasticism is now waged, however, against the background of the victorious primacy of epistemology, and therefore in its course the problem of the objectivity of knowledge poses itself after the enforcement of precisely this primacy: how can one speak of error and by what criteria is error defined if we cannot overcome the one-sidedness and relativity of human perspectives of knowledge anyway? Geulincx thus sees the relativistic consequences of the primacy of epistemology (in this respect he is closer to the Enlightenment than, say, Descartes), and at the same time he strives for their neutralization through the processing of nominalist positions within the framework of his anti-scholastic struggle. True knowledge, he writes, wants to grasp

⁶¹¹ See below Sect. 6 in this chapter; cf. above note 172.

⁶¹² *Metaphysica vera*, III = *Opera*, II, 186.

⁶¹³ *Op. cit.*, 285 (Annot.).

⁶¹⁴ Cf. Grimm, *Geulincx' Erkenntnistheorie*, 67 f.

things as they are, by abstracting from everything that our senses, our modes of thought, and our nomenclatures impose upon them. Thus physics strives to abstract from sensible forms and representations, while (true) metaphysics distinguishes between things and that which our modes of thinking (*modi cogitandi*) attribute to them. The Peripatetics, however, do precisely the opposite: in physics they rely unexamined on the senses, and in metaphysics they confuse things with the way in which we grasp them, whereby they hypostatize species, genera, etc.; in general, they believe naively that things are in reality as they appear in the senses or in thought.⁶¹⁵ All this becomes worse to the extent that the Peripatetics assume a dependence of thought on sense data and thereby distance themselves from things in a twofold manner, i.e., once on the basis of the *modus cogitandi* and once on the basis of the *modus sentiendi*.⁶¹⁶

In this overall perspective, Geulincx now seeks a solution for the problem of error. The components of the problem are for him the following three: our mode of thought, the connection of the same with an object, and finally the judgment on the basis of which this connection is found to be satisfactory. Error cannot lie in the first factor, since it is objectively impossible for us to grasp things at all through our finite thought without grasping them precisely through the mode which characterizes our thought essentially. Error must therefore spring from the second, but above all from the third factor, through the effect of which the deviation of the results of thought from things is solidified and sanctioned.⁶¹⁷ The Achilles heel of this view is obvious: if the *modus cogitandi* can neither be eliminated nor ignored, how then is it possible not to attribute it to the thing and not to accompany this attribution by a judgment? If the thing cannot be grasped by us otherwise than through our own *modus cogitandi*, then it can hardly be separated from it. Geulincx sees the dilemma, and despite the programmatic ambitions of his "true metaphysics" he admits the impossibility of grasping the pure *an sich* (in-itself) of things; he places his hopes for the avoidance of error on the never-fading reminder that things are not as we grasp them with thought or perceive them with the senses. The help which one can promise oneself from this insight is, however, not particularly great, and therefore Geulincx sees himself forced in the end to appeal to the divine element in us, which alone is capable of preserving us from errors.⁶¹⁸ This indirect return to the Cartesian *deus verax* is indicative of the fear which the obviously relativistic and skeptical consequences of the new

⁶¹⁵ *Metaphysica ad mentem Peripateticam*, Introd., Sect. I–II = *Opera*, II, 199 f., 204. On p. 206 Geulincx remarks that we attribute to things, among other things, our wishes and feelings, i.e., what we consider good or bad. Nevertheless, he adds in the manner of Hobbes or Spinoza, good and bad have to do only with our way of viewing and depend on the situation; the execution of a parricide, for example, is good if carried out by the authorities, but bad if a private person carries it out on their own initiative.

⁶¹⁶ *Op. cit.*, Pars Prima, Introd. = *Opera*, II, 210 f.

⁶¹⁷ *Op. cit.*, Intr., Sect. III = *Opera*, II, 206–209.

⁶¹⁸ *Opera*, II, 300 f. (Annot.).

primacy of epistemology had evoked. Geulincx ventured up to the threshold of these consequences; beyond the threshold he did not want to go.

Remarkable is his linguistic analysis and refutation of Peripatetic metaphysics. Geulincx proceeds here from his distinction between the thing in itself and the *modus cogitandi* as well as from his general nominalist attitude. The reason why the main concepts of Peripatetic metaphysics must be investigated exclusively on the basis of linguistic criteria lies in the fact that all other ways in which thought grasps things (i.e., either as beings or as modes of beings) refer to data outside of thought, whereas language is the work of thought itself.⁶¹⁹ From the moment in which we wish to concern ourselves with things by speaking or thinking, we must give them names and make substantives or subjects out of them.⁶²⁰ The things in themselves remain furthermore outside our universe of thought and language and become what we call "things" only through their entry into the same. In order for something to become a "thing," it must therefore cease to be what it is in itself, and become a subject in our speech. And as beings themselves become substantives, so too the modes of beings become adjectives; therefore the entire Peripatetic metaphysics, which deals with beings and their modes, can be reduced to the relationships between substantives and adjectives.⁶²¹ By means of the pair: subject (substantive) — predicate (adjective), Geulincx now analyzes the scholastic thesis regarding substance and its accidents. Substances are words which are originally substantives and then transform into adjectives (first we say "stone" and then "stony"), while with accidents the reverse is the case (first we say "brave" and then "bravery"). When we say, therefore, that substance is *ens in se*, but the accident is *ens in alio*, then we mean merely that something which was first expressed in the form of an adjective and attributed to a subject, later assumed the form of a substantive, whereby it is believed that it exists bodily in that subject to which it was previously attributed merely in the form of an adjective. Thus we say, for example, first "the snow is white" and then "whiteness exists in the snow." These linguistic changes justify, however, in no way a hypostatization of whiteness, especially since the only reason why the impression of an existence of whiteness in the snow arises is none other than the fact that the snow looks white. If the accident is a special being, as the Peripatetics opine, then it would have to be able to be thought just as independently as the substance; we know, however, that it cannot be thought independently of a subject. The Peripatetic hypothesis that substance and accident would exist independently of one another and then mutually penetrate and thereby unite, is simply monstrous.⁶²²

⁶¹⁹ *Metaphysica ad mentem Perip.*, I, § 1 = *Opera*, II, 211.

⁶²⁰ *Op. cit.*, 215.

⁶²¹ II, § 1 = *Opera*, II, 241.

⁶²² I, § 2 = *Opera*, II, 216 f.

As we must emphasize, Geulincx's critique of Peripatetic hypostatizations and abstractions springs, to an extent unknown even in the 16th or 17th century, from the insight into the fact that human thought imposes its own modes or categories upon things; this type of critique is thus more or less connected with the new primacy of epistemology. Geulincx now transfers his critique to other central concepts of scholastic-Aristotelian metaphysics, above all those of Being and Universals. In both cases he uses the same arguments: the Peripatetics arrive at such concepts not with the help of real abstractions, in which something is abstracted from a group of things that can be found again in each thing, but through fictitious abstractions, namely by hypostatizing our habits of thought and speech and arbitrarily projecting the nature of our thought and our language into things.⁶²³ Indicative of the historical constancy of certain anti-metaphysical motifs is the fact that Geulincx offers a linguistic analysis of the *ens* (= *id quod est*) which is identical to that of Valla.⁶²⁴ Much more important, however, remain the new viewpoints of Geulincx's critique of traditional metaphysics—a critique which, as said, rests on the new consideration of the metaphysical phenomenon in the light of the primacy of epistemology.

e. Spinoza and the Definition of Substance on the Basis of the Scientific Concept of Law

Spinoza's work constitutes a landmark both in the history of the critique of metaphysics and in the history of the crisis of metaphysics after the appearance of modern mathematical natural science. As a consistent and implacable critique of all forms of metaphysics known until then, Spinoza's abolition of the distinction between this-world and beyond, God and Nature, spirit and body must be regarded. On the other hand, however, this abolition takes place through the use of the conceptual means of traditional metaphysics, which are in turn radically reinterpreted according to the dictates of the young mathematical natural science. In the history of ideas, it is anything but rare that a concept is particularly emphasized or radicalized precisely at the threshold of its demise, whereby it loses its earlier traditional characteristics by being provided with a new content as a result of modernization attempts. This happened, for example, to the concept of substance, which occupies a central place in Spinoza's philosophy. We can therefore say that in him form (conceptuality) and content (approach to thought) are in opposition, in other words that, although the concept of substance predominates in his terminology, his thought stands under the sign of the ideas of function and law, as these had been worked out by the mathematical natural science of his century. The enormous expansion and radicalization of the concept of substance leads to its own dissolution, since here substance is identified with a universe whose components are grasped and depicted on the basis of their function within a strictly lawful system. Spinoza's pantheism is merely the metaphysical coat of

⁶²³ *Op. cit.*, §§ 1 and 8 = *Opera* II, 212, 236 f.

⁶²⁴ *Op. cit.*, 213; cf. Ch. I, Sect. 2 c.

paint of a mental attempt to formulate the ideas of function and law by means of the concept of substance.⁶²⁵

By identifying God and Nature with one another,⁶²⁶ Spinoza intimates that he could develop his philosophical system even without a (traditional) metaphysical coat of paint. The analysis of the Spinozistic concept of substance in its relation to attributes and modes shows likewise that Spinoza owes much less to mystical and Kabbalistic doctrines than some researchers opine; if these doctrines promoted Spinoza's monistic orientation in general, they nevertheless did not determine the content of his thought, which was hardly influenced by the various theories regarding the emanation of all things from the One, etc. Spinoza's philosophical starting point is rather the unification of the worldview as carried out by mathematical natural science. Spinoza, however, transfers this unification to all ontological levels. If mathematical natural science still left the spirit (God) outside the world-machine as its originator and mover, now God and World merge, whereby the spirit can no longer be what it was before; simultaneously the distinction between (spiritual) Beyond and (material) This-world falls away. Stated differently: if mathematical natural science had unified the this-worldly, Spinoza makes Being (Substance) in general homogeneous and uniform, whereby, however, he follows the model of mathematical natural science, whose unifying tendency he carries to the end. As he explains, his "Ethica" rests not only on metaphysics (the term means here only the doctrine of substance, without any reference to the distinction between Beyond and This-world), but also on physics.⁶²⁷ Spinoza adopts two fundamental conceptions of this latter. According to one, the universe is homogeneous, it thus knows not the hierarchy of the Aristotelian cosmos, but all its parts consist of the same matter;⁶²⁸ the other conception is that of strict, unchangeable, and eternal natural lawfulness, which governs everything without gaps and exceptions.⁶²⁹

This conception of natural lawfulness, in connection with the doctrine that God obeys exclusively the laws of his own nature and no others,⁶³⁰ amounts to the thesis that lawfulness and God or Nature would coincide. Just as nothing can be conceived outside God, so too there can be nothing outside lawful necessity; the necessity of things is identical with the necessity of the nature of God,⁶³¹ so that God's uniform nature or the uniform lawfulness carries the unity (uniformity) of the things of the world. From this perspective, Spinoza's theory of the single,

⁶²⁵ Rombach, *Substanz*, II, 499 f., 12.

⁶²⁶ "Deum seu naturam", *Ethica*, IV, Praef. = *Opera* II, 206.

⁶²⁷ *Epist.* XXVII = *Opera*, IV, 160 f.

⁶²⁸ *Ethica*, I, Prop. 15, Schol.

⁶²⁹ See e.g. *Ethica*, III, Praef. (= *Opera*, II, 138) and *Tractatus Theol.-Polit.*, VI (= *Opera*, III, 83); cf. *Ethica*, I, Ax. 3.

⁶³⁰ *Ethica*, I, Prop. 17.

⁶³¹ *Ethica*, II, Prop. 44, Cor. 2.

uniform, eternal, and infinite substance, which is nothing other than God or Nature, must be understood. It is obvious that the concept of substance is conceived here in a radically new way. Descartes defined substance both as the independent and dependent (in contrast to the dependent and dependent) and (traditionally) as substratum, i.e., as carrier of accidents and qualities, and he assumed an identity of both definitions. In contrast to this, Spinoza retains only the characteristic of independence and discards the traditional conception of substance as a supersensible subject or substratum or as a carrier of sensible properties; by regarding finite things as such as *modi* of the infinite substance, he shows precisely that he does not allow the Cartesian interlocking of the two mentioned definitions of substance to stand, but sees in ontological independence its sole specificum.⁶³² But if substance is held to be single and indivisible on the basis of the criterion of absolute independence—here too in contrast to Descartes, who designated the *res cogitans* and the *res extensa* as substances, although he admitted that this designation actually belongs only to God—then God and Substance, Substance and Nature must coincide. The principle of the uniqueness and absolute independence of substance means only that the universe, no matter what one calls it, constitutes an indivisible, infinite, eternal, and autarkic whole, which can be thought without any dependence on, or relation to, anything else.

In the new conception of substance, a radical and courageous detachment from all earlier theological and philosophical ideas about the nature of the universe is expressed. Conceptions such as the creation or the emanation of finite beings from an infinite one are eliminated—and this occurs precisely within the framework of the fusion of the concept of substance, decisive for Spinoza's thought, with the mathematical natural scientific concept of function or law. Since substance is no longer subject or substratum, it means (if it is to express Being in general) not the "true" world which is hidden somewhere behind perceptible appearances, but the All, which by definition is one and eternally the same, without any decrease or increase which would go back to creations *ex nihilo* or to inconstant emanations from the center to the ontologically weak periphery. To the extent that the distinction between substance and existence is made (incidentally only with regard to finite beings, see below), it means merely the distinction between abstract-general subsistence and the respective concrete application of natural lawfulness, through whose mechanisms, as these act in innumerable variations and combinations, natural beings arise. Since substance neither depends on anything else nor can be thought in relation to anything else, everything happens in it as a relation of it to itself. Precisely this relationship of substance to itself can be conceived as the relationship between abstract-general subsistence and the concrete applications of natural lawfulness. The latter, however, does not exist without its concrete applications, and therefore substance is not thought

⁶³² Curley, *Spinoza's Metaphysics*, 37 ff.

of as something separate from individual natural beings—although on the other hand it neither coincides with their numerical sum nor is absorbed in it; as the universal natural lawfulness which it is, substance must rather be regarded as the necessary functional relationship of things to one another or as the order in which and through which the things of the world exist. Substance is the unity of order and whole, the ordered lawful whole, in which the presence of the whole in the parts manifests itself through the determining effect of a uniform and unchangeable lawfulness. The whole precedes the individual things logically and ontologically in the sense that general lawfulness determines the nature of every single thing; as Spinoza emphasizes, however, the substance or the whole does not constitute a cause that penetrates into things from outside (*causa transiens*), but an innate and immanent cause (*causa immanens*), since the existence itself and the particular structure of a thing represent from the beginning a possible function of general lawfulness.⁶³³ If this is the case, then substance as cause can neither generate nor create natural beings as a merely external cause would; between cause and effect there is only a relationship of necessary succession,⁶³⁴ which however must simultaneously be understood as a process which takes place in the timeless framework of the One Substance.⁶³⁵

The way in which Spinoza depicts the relationship of substance to its attributes confirms this interpretation. A first consequence of Spinoza's radical renewal of the concept of substance is the completely new comprehension of the concept of the attribute. When the theologians or Descartes enumerated the perfections of God, the attributes ascribed to him expressed properties or qualities which in themselves could not constitute a substance. In contrast, Spinoza's attributes have a purely ontological character,⁶³⁶ so that substance is identical with its attributes⁶³⁷ or consists of them.⁶³⁸ This does not mean, of course, that the attributes are there before the substance, as it were as available parts from whose summation the whole arises; but neither does the substance exist before its attributes and independently of them. Substance and attributes are there simultaneously and condition each other mutually in their existence: just as substance requires the entire infinity of its attributes in order to be infinite itself, so too are the attributes themselves infinite only by virtue of the infinity of substance—that is, by virtue of the framework to which they belong and with which they can be coextensive. Now, every single attribute does not express the whole substance, which can exist as such only in the infinity of its attributes, and therefore Spinoza opines that the human intellect is not capable of grasping this entire infinity, and therefore it grasps not substance in itself and as such, but as this or that

⁶³³ *Ethica*, I, Prop. 18.

⁶³⁴ *Ethica*, I, Prop. 16, Schol.: *et ex necessitate ejus essentiae... sequuntur*.

⁶³⁵ On the content of this paragraph see Cassirer, *Erkenntnisproblem*, II, esp. 84 f., as well as Rombach, *Substanz*, II, 35 ff.

⁶³⁶ Delbos, *Spinozisme*, 85 f.

⁶³⁷ *Ethica*, I, Prop. 4, dem.; Prop. 19, Prop. 20 cor. 2.

⁶³⁸ *Ethica*, I, Defin. 6.

attribute.⁶³⁹ It must be noted, however, that the attributes in no way represent the subjective modes of viewing a substance which in itself knows no attributive determinations—they are thus not Kantian categories, opposite which stands a mysterious thing in itself, but they constitute the substance itself objectively.⁶⁴⁰

A second significant implication of the new definition of substance (i.e., on the basis of the criterion of independence) for its relationship to the attributes is the following. As stated, the independence of substance does not mean that substance exists even without attributes, but on the contrary that it can have infinite attributes. In other words:⁶⁴¹ precisely the independence of substance allows it to have attributes which are entirely different from one another or even stand in opposition to one another; this possibility was out of the question for the traditional substance, which, for example, could not simultaneously have red and green accidents. The independence of Spinoza's substance thus becomes the prerequisite for its inner richness, its infinite manifoldness, and its multidimensionality. This conception of substance incidentally permits the overcoming of Cartesian dualism—since now thought and extension can be ascribed simultaneously to one and the same substance, which according to Descartes could not be brought under a common denominator—and thus the consolidation of the monistic fusion of Beyond and This-world. In this way the refutation of the traditional theological (but also Cartesian) conception of the absolute simplicity and homogeneity of divine nature becomes possible. Spinoza ascribes to God various and distinct attributes, and therefore the unity of God means for him only that these attributes cannot exist separately from one another, which would bring about the dissolution of the substance.⁶⁴² Seen in this light, too, it becomes clear that substance is the inner law or the order which holds the components of the universe together in the form of a functional whole.

Since the attributes are objective determinations and not merely subjective modes of representation of substance, they can be grasped in their true character, although we know only

⁶³⁹ *Ethica*, I, Defin. 4.

⁶⁴⁰ Gueroult (*Spinoza*, 428 ff.) has convincingly refuted the subjectivist interpretation of Spinoza's doctrine of attributes undertaken by several researchers.

⁶⁴¹ *Ethica*, I, Prop. 10, Schol. etc.

⁶⁴² Gueroult, *Spinoza*, 447. Subsequently (455 ff.) he rightly rejects the view that substance is not absorbed in its attributes but represents an eternal creative source etc. (especially Brunschvicg, *Spinoza*, 243 and *passim*). Gueroult's critique also applies to analyses of Spinoza's physics, in which there is talk of an alleged overcoming of mechanism by a dynamic-vitalistic view, going back (also) to the natural philosophy of the Renaissance (see e.g. Rivaud, *Physique*, esp. 56 f., 49). As we have already remarked, the hermetic, mystical, or kabbalistic sources of inspiration of Spinoza undoubtedly strengthened his monistic orientation, but the philosophical crystallization of this monistic orientation took place within the framework established by modern mathematical natural science.

two of them, namely thought and extension.⁶⁴³ The nature of substance is recognized only through the knowledge of its attributes, since the ontological proof of substance, with which Spinoza's main work begins, says nothing other than that substance exists. But if the affirmation of the existence of substance says nothing about its nature or attributes, whereby is the knowledge of the latter to be attained? Spinoza answers this question by pointing to experience, which establishes the presence of thought and extension or of thinking and extended beings.⁶⁴⁴ In contrast to Descartes, Spinoza thus accepts the existence of the external world without further ado and declares, moreover, essential determinations of it to be attributes of God, so that God and World must finally coincide. We can even say that Spinoza, by taking the given empirical reality as the starting point of his thought, must come to the conclusion that this reality can only be conceived and designated as substance, since its attributes are eternal and infinite—as can be gathered from the fact of their existence itself. The attainment of the concept of substance in this way differs, to be sure, from its ontological proof and causes some logical difficulties;⁶⁴⁵ they appear, however, as not serious if we assume that the role of the ontological proof in Spinoza's argumentation is not decisive and that this proof, although it must precede in the logical order, aims in reality to ground or confirm with purely logical means the decision already taken for the transition from the assumption of empirically given reality to the concept of the One Substance. If, as Spinoza opines, only the infinity of substance guarantees its existence,⁶⁴⁶ then—in view of the uniqueness of substance which follows from its infinity⁶⁴⁷—everything that exists must also be able to exist only as a single uniform substance. From this it follows that the existence of empirically given reality implies the existence of substance and that therefore substance cannot be thought otherwise than as existent. It is obvious that after Spinoza's radical change of the concept of God, his ontotheology may no longer be regarded as a mere continuation or modification of the earlier one, which rested on the assumption that God and the sensible world were by definition different entities. Spinoza's placing of the proof of God at the beginning has more to do with the exposition of his philosophy *more geometrico* than with the content of his thought.

Through the theory of the One indivisible substance, Spinoza abolishes the scholastic-Aristotelian hierarchy of substances, wherein he again follows mathematical natural science. Now the uniqueness of substance implies its clear conceptual distinction from all finite things—at the same time, however, it implies that these latter can only be modes or

⁶⁴³ *Ethica*, II, Prop. 1–2.

⁶⁴⁴ Cf. *Ethica*, II, Ax. 5.

⁶⁴⁵ Walter, *Metaphysik*, 37 ff.; cf. Faggiotto, *Il Problema*, 147 ff.

⁶⁴⁶ *Ethica*, I, Prop. 8, Dem. and Schol. 1.

⁶⁴⁷ For there cannot be two substances with the same attributes, see *Ethica*, I, Prop. 5.

“expressions” of substance.⁶⁴⁸ As expressions of a substance which coincides with the existence and effect of lawful necessity, the modes are also subject to strict necessity, both in their relationships to one another and in their relationships to substance.⁶⁴⁹ Not only do the attributes in Spinoza's sense not resemble the scholastic-Aristotelian ones, since in contrast to these they constitute the substance itself, but his conception of the modes differs also considerably from the traditional one, specifically with regard to the neuralgic question of the relationship to substance. While accidents did not arise from the fixed character of substance, but came from outside to coexist with it temporarily, Spinoza's modes remain constantly connected with substance, which incidentally, infinite and autarkic as it is, cannot receive anything coming from outside anyway.⁶⁵⁰ Since the modes or finite natural beings express the same single and uniform substance, they do not differ from one another essentially, but only with respect to motion or rest, speed or slowness, etc. As finite beings, which they are, they cannot however in their isolation fully express substance and its lawfulness, especially since they stand ontologically below the attributes. The individual natural being therefore does not have the infinite substance as its own immediate cause, but another natural being or a series of such.⁶⁵¹ Finite beings are thus subject to a double determination, i.e., they arise (and disappear) at the intersection of the general lawfulness of substance with the particular causal chain acting in each case. Like the universe as a whole, every body is also grounded in the law of motion of its components. Their difference consists in the fact that the body cannot be (fully) explained on the basis of its own particular structure, since this is integrated into a broader framework and is (also) shaped by external factors, whereas the universe has nothing outside itself, is identical with the scope of its own lawfulness and therefore remains unchanged in contrast to finite bodies.⁶⁵²

As has been rightly noted,⁶⁵³ Spinoza offers no clear solution to the question of the transition from attributes to finite modes, which, as he writes, takes place through the mediation of infinite modes.⁶⁵⁴ The question becomes much simpler, however, if we forget the Neoplatonic tradition and its aftereffects and understand the relationship between finite beings and substance not as an emanation of this or that kind, but as a direct and indirect determination of the former by the lawfulness of the latter—thus in accordance with the functional conception of the scientific model. The two poles of Spinoza's thought—on the one hand God is the immanent cause of things, on the other hand things appear as links in a chain of finite causes and are determined accordingly—can be united if we assume that God is lawfulness and causality itself, which

⁶⁴⁸ *Ethica*, I, Prop. 25 cor.

⁶⁴⁹ *Ethica*, I, Prop. 29.

⁶⁵⁰ *Ethica*, II, Prop. 13, lem. 1.

⁶⁵¹ *Ethica*, I, Prop. 28, dem.; cf. I, Prop. 9.

⁶⁵² *Epistola XXXII* = *Opera*, IV, 170; cf. *Ethica*, II, Defin. 5 exp. and prop. 30.

⁶⁵³ E.g. Delbos, *Spinozisme*, 58 f.

⁶⁵⁴ *Ethica*, I, Prop. 23.

naturally must appear in respectively different forms, since it concretizes itself under respectively different circumstances. The three levels of Spinoza's ontology (substance or attributes, infinite modes, finite modes) correspond thus to three different ranges of the principle of causality or three different, but concentric circles of effect of lawful necessity, which could find their epistemological expression in nomological sentences with varying scope of validity.⁶⁵⁵ The essence of finite things is grasped to the extent that these are subsumed under general lawfulness, since particular lawfulness actually decides not about their structure, but about whether the latter can be realized under concrete circumstances or not. If the inner necessity or the essence of things is conceived in this way, the intellect ceases to see things in their spatial and temporal determinations and regards them within the framework of eternal substance, thus *sub specie aeternitatis*. This reduction of modes to substance shows that, although the levels of application of lawfulness are different, causality nevertheless remains one and indivisible; under the finite conditions of space and time, however, it must appear as an endless series of finite causes which determine the relationships between finite things.⁶⁵⁶

Spinoza also takes the path of mathematical natural science when he asserts that human thoughts are God's thoughts.⁶⁵⁷ If this assertion turns out much more emphatic in him than, say, in Galilei, the reason for this lies in his monistic philosophical premises, which allowed him to identify not only *res cogitans* and *res extensa*, but also the order of ideas and the order of things with one another.⁶⁵⁸ He shares with Galilei, despite different argumentation, another basic conviction: that the ultimate guarantee for the knowability of things on all levels is their lawful arrangement or strict, universally valid and omnipresent necessity.⁶⁵⁹ The transfer of this conviction from the content of philosophical thought to its form suggests the exposition of the system *more geometrico*: what can be completely and necessarily known can also be presented in the deductive manner of geometry, in its inner logical coherence. Even more consistently than Galilei, who often makes use of agnosticism at least for polemical intent, Spinoza combats traditional metaphysics not through the thesis of the limits of human knowledge, but on the contrary through the belief in its omnipotence. It might appear that this belief signifies not a refutation of metaphysics, but its resurrection on a new basis. This impression would not be entirely misleading, but on the other hand it must be noted that the omnipotent intellect in Spinoza recognizes not transcendent substances or ideas, but precisely the identity of Beyond and This-world. In the long run, this identity has damaged metaphysics much more than the

⁶⁵⁵ Curley, *Spinoza's Metaphysics*, esp. 71 ff.

⁶⁵⁶ Walter, *Metaphysik*, 70 ff.

⁶⁵⁷ *Ethica*, II, Prop. 11 cor.

⁶⁵⁸ *Ethica*, II, Prop. 7.

⁶⁵⁹ *Ethica*, II, Prop. 44 cor. 2.

new belief in the human intellect—a belief, moreover, which was now spurred by the achievements of mathematical natural science—has benefited it.

f. The Parallelism of Mathematics and Theology in Malebranche

As with Descartes and Spinoza, so too with Malebranche, the demand for a new metaphysics is combined with the emphatic rejection of the scholastic-Aristotelian one. Since this rejection occurs, however, in the concrete situation of the 17th century, it must not be regarded as a concomitant phenomenon of a sudden "inner renewal" of metaphysics in its autonomous development; rather, it goes hand in hand with a subjective and objective approach to those currents which decomposed the earlier forms of metaphysics. Stated differently: the critique of earlier metaphysics, formulated by the representatives of the new, constitutes in itself an acknowledgement of the necessity to connect metaphysics henceforth in content and form with mathematical natural science in some way. Malebranche's metaphysics is also historically determined in the sense that it proceeds from the fact of contemporary mathematical natural science and strives to ground and understand this fact from the perspective of certain philosophical-theological positions.⁶⁶⁰ Following Mersenne, Descartes, and Boyle, Malebranche considers mechanistic physics on the whole not merely acceptable, but from the theological standpoint even indispensable, for he fears the potential pantheistic consequences of the scholastic-Aristotelian conception of nature. The *formae substantiales*, the *formes plastiques*, etc., seem to lend natural beings the capacity for self-motion and thus to call into question the divine monopoly in the neuralgic area of the generation of motion.⁶⁶¹ Furthermore, such hypotheses unnecessarily complicated the functioning of nature, and thereby cast dubious shadows on divine wisdom, which operates on simple and easy paths, without undertaking purposeless and superfluous actions.⁶⁶² To the extent that Aristotelian physics is the application of Aristotelian logic, the magnitudes of the former constitute hypostatizations of the magnitudes of the latter. The ambivalence of logical terms (species, genus) is hereby illegitimately transferred to the investigation of nature, and just as illegitimate is the mixing of sense data with the objective qualities of bodies, which again calls a series of ambivalent terms into life. In the attempt to give their own terms a real content, the Scholastics claim there is a special substance as form of matter as well as innumerable small entities as substantial counterparts of empirical data.⁶⁶³ The idea of Being, which is innate to our mind thanks to its interweaving with divine reason, is also transformed by the Scholastics into a monstrous abstraction. All this therefore yields no clear

⁶⁶⁰ Cf. Schrecker, *Parallélisme*, 249.

⁶⁶¹ *Recherche de la vérité*, VI, 2, 3 = OC, II, 308 ff. On the similar views of Mersenne, Descartes, and Boyle see Kondylis, *Aufklärung*, 179, 182 f., 253 f.

⁶⁶² *Recherche*, III, 2, 6 = OC, I, 438.

⁶⁶³ *Op. cit.*, VI, 2, 2 = OC, II, 301 ff.

and distinct ideas, and it hinders us from investigating nature on the basis of just such ideas, to which belong primarily thought and extension.⁶⁶⁴

Malebranche thus rejects the peculiar scholastic-Aristotelian mixture of empiricism and intellectualism as the epistemological foundation of a metaphysics. His own purpose is not to discard the empiricist component of this mixture in order to cultivate the intellectualist one in pure form, but rather to change radically the intellectualist character of metaphysics through its mathematization. Metaphysics is located at the antipodes of immediate experience, which hinders our intellect in the acquisition of non-sensible truths or leads it astray.⁶⁶⁵ Empirical physics is unable to arrive at the highest concepts which refer to the ultimate components of bodies; in its realm too, highest and most general knowledge is reserved for metaphysics.⁶⁶⁶ This hierarchization would be quite similar to the Aristotelian one, had not the close binding of metaphysics to mathematics comprehensively changed the meaning of the subordination of physics to metaphysics. The mathematization of nature and of natural science allows Malebranche to count a "large part" of the latter, together with metaphysics and mathematics, among those branches of knowledge which contain necessary and not merely contingent truths.⁶⁶⁷ This distinction, which goes hand in hand with the sharp separation of intellect and experience from one another, plays a central role in Malebranche's thought. In its light he divides the sciences into two classes: those which investigate the relationships between ideas, and those which investigate the relationships between things by means of the corresponding ideas. The former are absolutely evident and certain, the latter rely only on the conjecture that things would correspond to our ideas of them, and they contain many inaccuracies and unclarities, although they can be very useful in life.⁶⁶⁸ On the basis of these criteria, metaphysics and mathematics now belong to the same class of sciences and share their essential characteristics. Mathematics, specifically algebra, is the "most fruitful and certain of all sciences," a "universal science," which forms "as it were the key to all others"; nothing sensible weighs upon it, and it even demands the detachment of the human spirit from passions and from sensibility in general. Exactly the same holds for metaphysics: it is also abstract insofar as it "does not flatter the senses" and has no sensible pleasure to offer; for this reason it has also, in Malebranche's opinion, been so much neglected.⁶⁶⁹ What was said about the relationships of mathematics to the remaining sciences is now repeated with regard to metaphysics: it is

⁶⁶⁴ *Op. cit.*, III, 2, 8, § 1 and III, 2, 9, § 4 = OC, I, 457–459, 471 f.

⁶⁶⁵ *Op. cit.*, III, 2, 3, § 3 = OC, I, 407 f.

⁶⁶⁶ *Op. cit.*, VI, 2, 3 = OC, II, 319.

⁶⁶⁷ *Op. cit.*, I, 1, § 2 = OC, I, 63.

⁶⁶⁸ *Entretiens sur la Métaphysique et la Religion*, VI, § 11 = OC, XII, 12.

⁶⁶⁹ *Recherche*, IV, 9, § 2 = OC, II, 90.

"universal science" and contains "the general truths which can serve as principles of the individual sciences."⁶⁷⁰

The impression could arise as if Malebranche is content with the epistemological meaning of "metaphysics," as it developed with Bacon and appeared clearly in Boyle, for example.⁶⁷¹ The impression would not be entirely wrong, but yet one-sided. For Malebranche's Christian conscience commands him to fuse the epistemological content of his metaphysics with the theological one. Metaphysics deals not only with the nature of God's ideas (about the connection of this nature with general epistemology we shall speak in a moment), but also with his goodness, wisdom, etc.⁶⁷² Through metaphysics we avoid errors of knowledge, but at the same time we also discover truths which directly concern us or our perfection and beatitude: what was faith thus becomes knowledge.⁶⁷³ In this way the question of the relationships between mathematics and metaphysics presents itself as the question of the relationships between mathematics and theology, mathematical knowledge and divine intellect. Malebranche may theologize out of personal, moral, and soteriological concerns—what is intellectually interesting and indicates the prevailing tendency in that historical moment is the fact that the result of his theological endeavors lies in the adaptation of God to the commandments of the new secular powers. For with him too, albeit on a different path and in a different form, appears Galilei's demand to read not only the book of nature, but also the thought of God with the help of mathematics as universal science.

Malebranche's pious wish to establish the closest possible relationships between mathematics and theology forces him to grapple with certain Cartesian positions. In order to undermine fundamental scholastic conceptions, Descartes had advocated a voluntaristic theology, i.e., he had denied the binding nature of eternal truths for God and made the validity even of mathematical truths dependent on God's sovereign decision. To be sure, Descartes attempted to neutralize the unpleasant consequences of this thesis for his system by the complementary assumption that God does not change the truths once he has established them.⁶⁷⁴ Nevertheless, the dependence of (mathematical) truths on the divine will cast a shadow on their objectivity, and moreover it seemed to nullify Descartes' effort to declare God the guarantor of the reality of human metaphysical and scientific knowledge. Indicative of the waning influence of scholastic questions on the formation of philosophical or metaphysical consciousness after the establishment of the new intellectual framework by mathematical natural science is the fact that Malebranche makes (mathematical) truths independent and autonomous from the divine will

⁶⁷⁰ *Entretiens*, VI, § 11 = OC, XII, 133.

⁶⁷¹ See Sect. 2 in this chapter.

⁶⁷² *Recherche*, *Eclairc.* XVII = OC, III, 307.

⁶⁷³ See above note 255.

⁶⁷⁴ See above note 152.

again, without feeling in any way indebted to Scholasticism and apparently also without grasping the polemical reasons which had driven Descartes to assume the voluntaristic position. He is concerned exclusively with the danger of relativism and skepticism; to eliminate it, he goes so far as to dispute the Cartesian innate ideas, since they served as it were as the permanent repository of those truths which stood under the sword of Damocles of the divine will.⁶⁷⁵

The contrasts in metaphysical points of detail constitute, however, the consequence and expression of a fundamentally different attitude toward the question of the relationships between reason and religious faith. Descartes adopts in part the strategy of the agnostics of the 14th–16th centuries and denies the (absolute) identification of theology and (new) metaphysics, by withdrawing the Christian doctrines of the sacraments, divine grace, etc., from the jurisdiction of the latter. Malebranche also distinguishes between mathematical truths and articles of faith, but he wants to include the typical contents of the (old) theology in the (new) metaphysics, since he believes that they are rationally structured and graspable; if this was not yet recognized, the reason for it lay not in their essence, but in a weakness of the human intellect, which however could one day be overcome, so that all knowledge could be brought to a single common denominator.⁶⁷⁶ Thus a seemingly paradoxical reversal of ideas and intentions takes place. In the fusion of metaphysics and mathematics, the former assumes the logical structure of the latter, so that from the pious expansion of the contents of metaphysics in the sense of traditional theology, the (indirect) demand for the rational apprehension of articles of faith results. By this detour a bridge is built to the idea of the religion of reason or natural religion, and theology is undermined precisely in the effort to support it additionally through its inclusion in the (new) metaphysics. This was a further consequence of the decisive presence of mathematical natural science in the intellectual horizon of the 17th century.

The determining influence of the new intellectual-historical reality on Malebranche's thought becomes visible in the manner in which he concretely imagines the unity of metaphysics and mathematics. Although he wants to clear the way for a rational apprehension of the mysteries of faith, he does not believe, on the other hand, that our intellect, at least in its present constitution, can know the essence of God and of natural things. Our metaphysical and mathematical knowledge deals exclusively with functions and relations, i.e., it reconstructs mentally the order of the world as a hierarchized and rationally structured whole, whose parts stand in a specific functional relationship to one another and are even defined on the basis of the same. Mathematical and metaphysical-theological truths are equivalent and interchangeable, for they refer equally to the order of functions and relations; the reconstruction of this order starts from

⁶⁷⁵ Schrecker, *Parallélisme*, 220 f., 234.

⁶⁷⁶ Gouhier, *Vocation*, 145 ff.

the ideas of numbers and extension, thus from the clearest and most evident ideas,⁶⁷⁷ and arrives via increasingly complicated combinations at the mathematical representation of all possible relationships between things and of all laws prevailing therein. If mathematics can detach the spirit from everything sensible and lead it to God,⁶⁷⁸ this is possible because God himself contains innumerable intelligible numbers⁶⁷⁹ and furthermore the idea of extension: Malebranche intimates this when he writes that God includes not only the perfections of the spirit, but also those of matter.⁶⁸⁰ An exact structural correspondence thus arises between the manner in which universal mathematical-metaphysical knowledge contains all individual sciences, and the manner in which God embraces all individual beings. From this correspondence it follows that the divine intellect recognizes and generates the sensible world according to that intelligible order which is summarized in mathematical-metaphysical knowledge; absorption in this latter is therefore tantamount to absorption in the mind of God, it is an act of love for God.⁶⁸¹

The famous *vision des choses en Dieu* [vision of things in God] means therefore nothing other than the mathematical apprehension of the functional relationships between things, whose ordered sum constitutes the world. Since the knowledge of things is not mediated to us through their sensible dimension (and also not through any innate ideas), it grasps things not as they are in the external world, but reflects their archetype in the divine intellect or rather it forms itself a reflection of the *intellectus archetypus*, a sign of the participation of the human intellect in the divine. The cognitive unification of the world through the assumption that certain simple intelligible principles rule uniformly within it is ontologically underpinned by the thesis of the original unity of the human spirit (as well as all others) with God: God, believes Malebranche, is the place of spirits just as space is the place of bodies.⁶⁸² God becomes as it were the sun of truth, whose rays are the finite spirits; these in turn can know the truth because they live in it, participate in it, and are to a certain extent consubstantial with it. The vision of things in God implies, to be sure, no possibility of knowing the essence or the "absolute Being" of God; God is knowable only in his relation to his creatures or to the extent that his creatures participate in him.⁶⁸³ On the other hand, however, when we see the eternal truths, we see God himself, in whom the ideas of these truths are located.⁶⁸⁴ The knowledge of truth, just like the love of virtue,

⁶⁷⁷ *Recherche*, VI, 2, 6 = OC, II, 373.

⁶⁷⁸ *Op. cit.*, IV, 6, § 2 = OC, II, 53.

⁶⁷⁹ *Entretiens*, II, § 2 = OC, XII, 52.

⁶⁸⁰ *Recherche*, III, 2, 9, § 4 = OC, I, 472 f.

⁶⁸¹ *Op. cit.*, V, 5 = OC, II, 174.

⁶⁸² *Op. cit.*, III, 2, 6 = OC, I, 437.

⁶⁸³ *Op. cit.*, 438 f.

⁶⁸⁴ *Op. cit.*, 444.

proves the union of the spirit with God, it constitutes a kind of possession of God.⁶⁸⁵ The "natural union" of our spirit with infinite reason enables it to overcome finite magnitudes and to devote itself to metaphysical investigations, which among other things also arrive at the finding of the iron necessity of reason even regarding divine thought and action.⁶⁸⁶ Vision of things in God means therefore vision of things in their necessity. The universal validity of necessary reason or of rational necessity guarantees the certainty of mathematics and theology as well as their inseparable unity with one another, while simultaneously subsuming divine and human intellect under a great common denominator. The coupling of the idea of universal necessity with the idea of the unity between divine and human intellect on the basis of their common mathematical structuring was, as we must repeat, the way in which Malebranche sought to master Galilei's problem: to read the book of nature and the thought of God using the same alphabet.

g. The Relation of Mathematics and Metaphysics and the Definition of Substance as Subject of Knowledge in Leibniz

Detecting the influence of mathematical natural science in Leibniz's work is in many respects more difficult and intricate than in other analogous cases. Since Leibniz endeavors to harmonize positions that diverge substantially from one another and thereby to fashion a worldview construction acceptable from all sides, which would be capable of defending and simultaneously renewing traditional ideas and values—he designs a multifaceted and multi-layered philosophical construct, within which the elements and the methodological or ontological approaches of mathematical natural science either are scattered or are covered over by heterogeneous thought material. Even in this form, however, they do not cease to penetrate this heterogeneous thought material directly or indirectly, so that the latter, for all its unevenness, is nevertheless finally cast into thought patterns which had been created by mathematical natural science. The main characteristic of Leibniz's philosophy is thus not the parallel existence of heterogeneous intellectual magnitudes within it, but rather their mutual interpenetration, the interlocking of the conceptual structure of the one with the content of the other and vice versa. It is generally true that Leibniz basically attempted to restore the metaphysical concept of substance to honor under the conditions which the mathematical-scientific concept of function and law had called into life; on the other hand, the assertion remains one-sided that he had wanted to achieve the harmonization of these two concepts through a hierarchization in which metaphysics stood higher than mathematical-mechanistic physics, whereby each of the two disciplines possessed its own

⁶⁸⁵ *Op. cit.*, V, 5 = OC, II, 168.

⁶⁸⁶ *Entretiens*, VI, § I–II = OC, XII, 131, 133 f.

categorical system.⁶⁸⁷ This is certainly not false, but the decisive new moment lies rather in the fact that Leibniz's substance is comprehensively modernized, i.e., on the one hand it is regarded at least partially as a functional system and on the other hand conceived as a knowing subject, so that the way is cleared for the primacy of epistemology; simultaneously the ideal of a universal, mathematically oriented epistemology and methodology is projected, just as with Malebranche, into the metaphysical realm or into the structure of the divine intellect. The following analysis aims to show this.

The old and deep familiarity of Leibniz with the epistemological ideal, which had formed early in the 17th century in connection with the scientific thought pattern, is solemnly attested to in his plans for a *mathesis universalis* analogous to the Cartesian one. Leibniz's *ars combinatoria* aims to analyze all complex concepts into simple ones, to use these latter as a kind of alphabet and thereby to proceed to the methodical invention (*inventio*) of all things that can be found and classified in this way.⁶⁸⁸ As the composition of concepts by means of innumerable acts of thought shows,⁶⁸⁹ thought here loses its qualitative character and assumes a quantitative one, it becomes thus, as Hobbes opined, a succession of additions and subtractions. The demand for absolute precision forces the reduction of language to series of signs or symbols which permit a mathematically-like calculus, thus allowing themselves to be replaced at any time by equivalents, so that through constant transpositions and transformations ever new combination possibilities arise.⁶⁹⁰ Within the framework of this quantitative treatment and use of thought and its linguistic clothing, and with the intention of securing the universal validity of the new epistemology and method, logic and mathematics are identified with one another or at least closely connected: mathematics is derived from logic, to whose rules it remains subject.⁶⁹¹ This close connection must, to be sure, be understood in its contrast to the Aristotelian interlocking of logic and ontology under the sign of the qualitative mode of thought. Especially interesting for our question is in any case the fact that Leibniz uses the term "metaphysics" to designate the *ars combinatoria*, and thus he lends it that epistemological-methodological meaning which it acquired after Bacon; since Leibniz knew the Hobbesian definition of "first philosophy,"⁶⁹² we must assume that his own reinterpretation of the term "metaphysics" was not accidental. By emphasizing the close connection between mathematics and *ars combinatoria*,⁶⁹³ he considers algebra a doctrine which can be applied to the quantitative magnitudes of combinatorics, and

⁶⁸⁷ This is asserted by Kaulbach, *Einleitung* 125.

⁶⁸⁸ Letter to Duke Johann Friedrich = *Phil. Schr.*, I, 58.

⁶⁸⁹ See e.g. *De Arte Combinatoria* = *Phil. Schr.*, IV, 65.

⁶⁹⁰ Cf. Scholz, *Mathesis Universalis*, esp. 141 ff.

⁶⁹¹ *Mathesis Universalis*, I = *Math. Schr.*, VII, 54; cf. the letter to G. Wagner (1696) = *Phil. Schr.*, VII, 524.

⁶⁹² Cf. Leibniz's remarks, presumably written in 1663 or 1664, on D. Stahl's *Compendium Metaphysicum*, *Phil. Schr.* (Prussian Acad. of Sciences), I, 21 f. On Hobbes cf. Sect. 4 in this chapter.

⁶⁹³ See on this McRae, *Unity of Science*, 46 f.

opines that this latter would have to do with metaphysics by virtue of its universal character: it formed indeed a *Characteristica in universum*.⁶⁹⁴ Even clearer is another passage in which Leibniz establishes a direct connection between the universality of mathematics and metaphysics, which treats equally of that which is common to all beings; just like metaphysics, mathematics too forms no isolated branch of knowledge, but is built up through the compilation of related elements from various disciplines.⁶⁹⁵ As one sees, when Leibniz speaks of mathematics and metaphysics as highest instances of knowledge, he thinks exclusively of epistemological and not of ontological criteria.

Leibniz never detached himself from the conviction that philosophy and mathematics belong together.⁶⁹⁶ However, the more his need intensified to defend those values for which traditional metaphysics seemed to vouch, the less he considered the mathematical mode of thought in itself capable and worthy of forming the exclusive method and the crown of philosophy. Hobbes' example meant for Leibniz that mathematics in itself by no means suffices for the refutation of materialism and atheism, which is why he also advocates the subordination of mathematics to metaphysics.⁶⁹⁷ This subordination, to be sure, dynamizes Leibniz's conception of mathematics in the same sense as the (likewise metaphysically grounded) overcoming of pure mechanism in physics does with his conception of nature;⁶⁹⁸ the dynamization of mathematics is unable, however, to place it at the peak of knowledge, for it is not original, but only an outflow of the consideration of mathematics from the perspective of metaphysical questions. Even the demonstrative capacity of mathematics, which metaphysics lacks, constitutes no proof of its superiority, but goes back rather to the fact that here the demonstrations lie on an inferior ontological level, where the testimonies of the senses still play an important role.⁶⁹⁹ To the extent now that mathematics is disparaged, the epistemological-methodological significance of metaphysics is necessarily displaced and its traditional one emphasized again—above all in its interweaving with those normatively charged ideas which according to Leibniz's view must be preserved at all costs: God and the soul. Metaphysics thus becomes, just like ethics, part of natural theology; ethics relates in turn to metaphysics as practice to theory, for the knowledge of God and the soul, which alone is capable of guiding moral action, depends on metaphysics as knowledge of substances.⁷⁰⁰

⁶⁹⁴ *Initia rerum mathematicarum metaphysica* = *Math. Schr.*, VII, 24.

⁶⁹⁵ *De Arte Combinatoria* = *Phil. Schr.*, IV, 35 f.

⁶⁹⁶ See e.g. the letter to Malebranche of March 13/23, 1699 = *Phil. Schr.*, I, 356.

⁶⁹⁷ Second Letter to Clarke, *Phil. Schr.*, VII, 355.

⁶⁹⁸ See the excellent work by Vuillemin, *Différence et identité*, passim.

⁶⁹⁹ *Nouveaux Essais*, IV, 2 = *Phil. Schr.*, V, 352.

⁷⁰⁰ *Op. cit.*, IV, 8 = *Phil. Schr.*, V, 413.

For all his emphatic defense of the moral-normative aspects of traditional metaphysics, Leibniz recognized the necessity of a substantial change of its structure and content. He regretted that many occupied themselves only with mathematics to the neglect of metaphysics, and suspected the reason for this lay in the degeneration of the latter.⁷⁰¹ Guilty for this condition in his eyes were not least the Scholastics, whom he reproaches—evidently under the influence of his early reading of Nizolio⁷⁰²—for the use of vague concepts, empty distinctions, the definition of metaphysics as science of being as being, etc., etc. Subsequently, however, he demands the adoption and utilization of the good elements of scholastic-Aristotelian metaphysics, among which he highlights particularly "the great and beautiful truths about God and the soul." At the same time he notes the great progress of physics in the recent past and demands a new metaphysics which would take it into account and solve the problem of substance with a double intention: to secure the spirit (God and soul) and to guide the remaining sciences.⁷⁰³ This guidance is understood, however, not as a mere summary and application of the general epistemological and methodical principles which are valid for every individual science, but rather as a moderation of extreme mechanism and mathematicism in the light of the metaphysical grounding of God and soul. This becomes visible in the manner in which Leibniz conceives the relationships between physics and metaphysics. For the explanation of natural phenomena as such, metaphysical knowledge or the knowledge of substance is not necessary, and the Scholastics committed an error when they resorted to metaphysics in the realm of natural science,⁷⁰⁴ in which only the lawful course of phenomena is up for debate. The autonomy of the mechanistic explanation in the "system" of phenomena implies, however, by no means its exclusivity, since this system can just as well be explained teleologically.⁷⁰⁵ Both explanations are legitimate—but under two conditions: that one does not mix them with one another and that one places the mechanics of phenomena under the aegis of their metaphysics.⁷⁰⁶ By equating the mechanistic consideration with the mathematical one and thereby demonstrating once again the subjection of mathematics to metaphysics, Leibniz complements and relativizes at the same time his view of the possibility of a complete mechanistic explanation of natural phenomena by the thesis that the general principles of material nature and of mechanics itself are more metaphysical than geometrical, that they thus have to do with certain invisible forms or substances.⁷⁰⁷

⁷⁰¹ *De primae philosophiae emendatione* = *Phil. Schr.*, IV, 468 f.

⁷⁰² See his commentary on *De veris principiis* = *Phil. Schr.*, IV, 127 ff.

⁷⁰³ *Nouveaux Essais*, IV, 8 = *Phil. Schr.*, IV, 412 f.

⁷⁰⁴ *Discours de Métaphysique*, § 10 = *Phil. Schr.*, IV, 434 f.

⁷⁰⁵ *Specimen Dynamicum* = *Math. Schr.*, VI, 243.

⁷⁰⁶ Letter to Remond of Jan. 10, 1714 = *Phil. Schr.*, III, 607.

⁷⁰⁷ *Discours de Métaphysique*, § 18 = *Phil. Schr.*, IV, 444; cf. the letter to Volder of Sept. 6, 1700 = *Phil. Schr.*, II, 213.

All this is said in connection with the problem of force, which is thought in its opposition to the mere quantity of motion. As is well known, Leibniz has often and expressly connected metaphysics and dynamics with one another,⁷⁰⁸ and furthermore coupled the concept of force with that of substance, which constitutes precisely the central concept of metaphysics.⁷⁰⁹ The analysis of the concept of substance can thus show more than anything else the extent to which Leibniz's metaphysics is formulated under the (conscious or unconscious) influence of mathematical natural science. First of all, Leibniz rejects the scholastic-Aristotelian view of the relationships between substance and accidents. These, he thinks, cannot detach themselves from the substance.⁷¹⁰ The accidents cannot therefore be regarded as independent beings, especially since they are frequently only relations (*rappports*) and their concept arises only through abstraction. If we separate them from their common subject or substratum, we can state nothing about the latter.⁷¹¹ If now both the traditional view of substance as a fixed being with variable accidents and its Cartesian-Spinozistic definition on the basis of the criterion of independence are rejected, the question arises automatically to what extent substance consists in the functional relationships between its attributes. Against Descartes, Leibniz remarks that for the definition of substance we need not only the relationship to other substances, but also and even more the relationship to its own attributes; in order to distinguish substance from its attributes, we cannot rely on the criterion of independence, since substance and attributes depend on one another.⁷¹² Elsewhere he connects the unavoidable relationship of substance to other or to its own attributes with the fact that neither substance with a single attribute nor a pure autonomous attribute can be thought.⁷¹³ The togetherness of substance and attributes means that the (complete) concept of substance contains all its possible attributes, thus all its present states.⁷¹⁴ Seen in this way, substance is not merely governed, but virtually constituted by that fixed lawfulness which binds its possible states to one another⁷¹⁵—or else, according to another formulation: the nature of substance consists in that ordered tendency whereby phenomena are generated in a certain sequence.⁷¹⁶ The preeminence of the criterion of the functional relationships between the components of substance becomes likewise clear when Leibniz writes that the constant adherence to the same law of order and continuity takes place

⁷⁰⁸ See e.g. the small paper of May 1702 = *Math. Schr.*, VI, 100.

⁷⁰⁹ *De primae philosophiae emendatione* = *Phil. Schr.*, IV, 469.

⁷¹⁰ *Monadologie*, § 7 = *Phil. Schr.*, VI, 706–708.

⁷¹¹ *Nouveaux Essais*, II, 23, § 1 = *Phil. Schr.*, V, 202.

⁷¹² *Animadversiones in partem generalem principiorum cartesianorum* = *Phil. Schr.*, IV, 364.

⁷¹³ Letter to de Volder of April 1702 = *Phil. Schr.* II, 239.

⁷¹⁴ *Discours de Métaphysique*, § 8 = *Phil. Schr.*, IV, 433.

⁷¹⁵ Letter to de Volder of Jan. 21, 1704 = *Phil. Schr.*, II, 264 (*legem quandam esse persistentem ... id ipsum est quod substantiam eandem constituere dico*); cf. the letter to Arnauld of Dec. 23, 1690 = *Phil. Schr.*, II, 136 (*legem continuationis seriei suarum operationum*).

⁷¹⁶ Letter to Bayle n.d. = *Phil. Schr.*, III, 58 (*tendance réglée, de laquelle les phénomènes naissent par ordre*).

in composite as well as in simple beings.⁷¹⁷ Substance is defined, however, not only on the basis of the functional relationships of its own components to one another; its relationships to other substances provide it the possibility to express the same and thus to participate in the universal functional system, the system of universal harmony.⁷¹⁸

Leibniz connects, as is well known, the ontological view regarding the necessary togetherness of substance and attributes with the logical axiom that true propositions are only those in which the attribute is contained actually or potentially in the subject (S is A), so that with a complete knowledge of the subject all its attributes would be attributed to it; every grammatical subject is admittedly not also a subject in the ontological sense, but only when in another proposition it cannot take the place of a simple attribute.⁷¹⁹ We need not concern ourselves here with the much-discussed question whether the premises of Leibniz's philosophy are purely logical or worldview-based and whether its claim is legitimate to derive not only the general concept of substance but also its nature from logical axioms. It must be noted, however, that the logical priority of propositions of the type "S is A" seems to go hand in hand with the innovative tendency⁷²⁰ of the reduction of substance to its attributes. On the other hand, it is beyond doubt that Leibniz in various important passages contrasts substance with attributes and considers the former as carrier of an independent dynamic; he does this, to be sure, primarily for theological reasons, because he wants to prove against Spinoza that God cannot be the only substance, in order thereby to exclude any pantheism or atheism. But regardless of whether Leibniz wavers between two incompatible positions or in reality has always followed the second,⁷²¹ the strong influence of the mathematical-scientific functional consideration on his definition of substance cannot be disputed.

The new currents gain entrance into Leibniz's metaphysics in another way as well. The concept of substance is mobilized here namely not to put a stop to the primacy of epistemology and to restore its rights to the ontological question, but on the contrary provides the framework for the treatment of the problem of knowledge; in Leibniz's words, the knowledge of substance offers the key to inner philosophy or to the philosophy of consciousness.⁷²² As happens frequently in transitional periods, in which innovative and conservative tendencies and intentions cross in paradoxical combinations, so in this case too a traditional concept is equipped with a

⁷¹⁷ *Eclair. dif.* Bayle = *Phil. Schr.*, IV, 522 (*suivre perpetuellement une même loi d'ordre ou de continuation*).

⁷¹⁸ *Monadologie*, § 59 = *Phil. Schr.*, VI, 616.

⁷¹⁹ *Discours de Métaphysique*, § 8 = *Phil. Schr.*, IV, 432 f.

⁷²⁰ See above all *Theodicée*, § 393 = *Phil. Schr.*, VI, 351.

⁷²¹ The former view is held by Russell, *Philosophy of Leibniz*, 50, the latter by Jalambert, *Theorie leibnizienne*, 67 ff., 148 f.

⁷²² Letter to Bourguet of March 22, 1744 = *Phil. Schr.*, III, 567; cf. the letter to Burnett of Jan. 20/30, 1699 = *Phil. Schr.*, III, 245.

substantially new content, whereby the linguistic usage and the general conciliatory tone and purpose conceal the radicality of the change. Leibniz continues and expands in this critical point Descartes' path, who was the first to interlock ontological and epistemological problems by defining one of the substances as self-conscious subject or as *res cogitans*. The subject now loses the traditional Aristotelian meaning of the carrier of attributes and acquires the modern one, it becomes thus the active carrier of knowledge, the subject of knowledge, which stands opposite an object of knowledge. Leibniz does not limit, however, as Descartes does, the identity of substance and subject (in the new sense) to a single substance, but regards it as constitutive for the concept of substance in general. The fusion of epistemology and ontology is achieved here by the detour of a panpsychism, in which every substance is conceived as a soul which, although possessing a respectively different degree of consciousness, is nevertheless endowed with an original force and a constant activity.⁷²³

Consciousness and knowledge are now nothing other than a form of this restless activity of substance. The mentioned fact that with every substance, notwithstanding its simplicity, there is a multitude of determinations and relationships, means in the perspective of the problem of consciousness that even the simplest thought consists of a multiplicity of elements.⁷²⁴ Consciousness forms thus a system of functional relationships whose unity results from the common reference of its components. The Ego provides the foundation on which the connection of the various experienceable situations of consciousness takes place.⁷²⁵ Corresponding to the double character of the Leibnizian substance, the functional relationships which constitute it, or at least determine it, unfold on two levels, they are thus both relationships between (knowing) subject and (knowledge) object and relationships between (substantial) subject and attributes or accidents. To the extent that these two forms of relationships are identical, the epistemological and ontological definition of substance coincide. For the formation of representations, i.e., the attainment of knowledge, is nothing other than the self-presentation of substance in its attributes. Whenever representations arise, the (knowing) subject also appears in them as their creator. The existence and the activity of substance becomes visible in this two-sided process. In its attributes or representations, substance assumes the form of the object or of the objective worldview, but simultaneously it stands opposite this same object—this time as (knowing) subject and knowing that it itself as subject and its own attributes as objects constitute the consubstantial elements of a unitary functional relationship.⁷²⁶

⁷²³ *Monadologie*, esp. §§ 15, 19, and *Theodicée*, § 87 = *Phil. Schr.*, VI, 150; cf. *Specimen dynamicum* = *Math. Schr.*, VI, 235 (*agere est character substantiarum*).

⁷²⁴ *Monadologie*, esp. §§ 13, 16 = *Phil. Schr.* VI, 608, 609.

⁷²⁵ Cf. Cassirer, *Leibniz' System*, esp. 356, 359.

⁷²⁶ Janke, *Leibniz*, 22 f., 35 f., 74 f.

Leibniz's metaphysics culminates in the idea of God, since its object is the Being and God is precisely the source of Being. Metaphysics is thus theology and only as theology can it provide the crown of knowledge and at the same time the guiding science of all individual sciences. Therefore Leibniz interprets the Aristotelian conviction that the principles of the individual sciences would be established by a higher science in the sense that the complete understanding of science makes the knowledge of God necessary.⁷²⁷ The connection of metaphysics and theology has nevertheless with Leibniz a substantially different meaning than with Aristotle—and precisely because of the influence of the mathematical-scientific functional consideration on the formation of Leibnizian metaphysics. For with Leibniz the intellect of God appears as the summary and extreme refinement of the new epistemological and mathematical-scientific principles, which indicates once again the tacit but obvious transformation of the content and function of conventional concepts and views. According to Leibniz's formulation, God's intellect forms the locus of the eternal and necessary truths, which, as is asserted against Descartes, are not subject to eventual fluctuations of the divine will and contain the determining cause as well as the normative principle of Being—in short, the laws of the universe.⁷²⁸ This original interweaving of divine intellect and immutable universal lawfulness explains why God sees things as they actually are, i.e., according to the principles of geometry; he sees them not only in themselves or in their modifications, but above all in their mutual functional relationships (*relationes*), whose objective character is based precisely on their existence in the divine intellect.⁷²⁹ The knowledge of the relationships both between creatures and between their actions was present even before creation in pure, abstract form.⁷³⁰ Extremely significant finally is the connection which Leibniz establishes between mathematics (as *ars inventionis*), "true" logic, and "true" metaphysics, which for its part coincides with natural theology, i.e., with the rational knowledge of God as the principle of all knowledge.⁷³¹ The mathematical conception of the divine intellect comes very close to Leibniz's early dreams of a universal science and method of discovery. Thus the ideal which he drew directly from the mathematical natural science of his time lives on in his theology.

⁷²⁷ *Theodicée*, § 184 = *Phil. Schr.*, VI, 227. On metaphysics as theology in Leibniz cf. Martin, *Leibniz*, 221 f.

⁷²⁸ *Nouveaux Essais*, IV, 11 = *Phil. Schr.*, V, 429; cf. *Monadologie*, § 43 = *Phil. Schr.*, VI, 614.

⁷²⁹ See the letter to des Bosses = *Phil. Schr.*, II, 438.

⁷³⁰ *Theodicée*, § 47 = *Phil. Schr.*, VI, 129.

⁷³¹ See the letter to Duchess Sophie = *Phil. Schr.*, IV, 291 f.

6. The abortive modernization and the fragmentation of theological metaphysics under the pressure of the new currents

Among the great long-term changes in the structure of knowledge that were brought about by humanistic critique of metaphysics and subsequently by the anti-metaphysical implications of mathematical natural science belongs also, as already emphasized, the autonomization or at least the revaluation of method and of logic (as a methodical organ) vis-à-vis the object of cognition in general; this autonomization connects, to be sure, directly or indirectly with the new primacy of the *certitudo modi procedendi* over the *certitudo obiecti* and with the likewise new primacy of epistemology. The corpus of knowledge seems now to be divided into two parts, the first of which comprises general logical (and mathematical) or methodical principles, while the second is dedicated to the investigation of things in the light of precisely these principles. The ideal of the *mathesis universalis* as well as the reinterpretation of the terms "metaphysics" and "first philosophy" in the epistemological and methodological sense are founded in this general conception of the organization of knowledge. In the following, we will show that the dissolution of the traditional unity of cognition and being has reflected itself in the attempts at a reconstruction or renewal of theological-scholastic metaphysics, and indeed at the same time that mathematical-scientific thought structures were decisively influencing efforts toward the establishment of a modernized secular or non-scholastic metaphysics. These efforts, from Descartes to Leibniz, certainly assimilated the new currents to a much greater extent than the scholastics did, and above all they grappled directly with the questions posed by mathematical natural science, whereas the reconstruction of scholastic metaphysics was inspired chiefly by the division of knowledge into general and special—that is, into knowledge with universal validity

(ontological principles or logical rules) and into knowledge that, while logically and methodically dependent on the former, nevertheless relates to a concrete individual object. Despite these important differences, there is no doubt that we are dealing here with phenomena that are rooted in the same space and in the same time, in the same changes and tendencies. The approach, which we could call the abortive modernization of scholastic metaphysics, takes on in general two complementary forms: first, general metaphysics is separated from special metaphysics, whereby the former transforms itself as a rule into logic or epistemology, and second, special metaphysics expands gradually in the sense of modern contents of knowledge, i.e., anthropology-psychology as well as physics.

The conjecture would be wrong that the abortive modernization of scholastic metaphysics was undertaken by progressive theologians who wanted to find a connection to the new development. Quite the contrary. But as is often the case in intellectual as well as in social and political history, an originally conservative and defensive intention set a process in motion that in later phases, due to the change in the general situation, slipped out of control and amounted to the partial, albeit covert, appropriation of modernist tendencies on the part of their initial opponents or their epigones. The programmatic distinction between metaphysics in the sense of the science of being as being and metaphysics in the sense of theology is made for the first time in 1562 by the Jesuit Pererius. Pererius reserves the name "Metaphysics" exclusively for theology, the *divina scientia*, while he calls the science of being as being first philosophy or *scientia generalis*. Pererius's "Metaphysics" certainly includes, besides theology, the investigation of the *transcendentalia* and the categories, but the theological component clearly predominates. This predominance of theology means concretely that metaphysics is the science of immaterial substances, that is, it treats of God and all other spirits. Put differently: metaphysics is not, as its etymology suggests, the science of the causes of nature and of all that which comes essentially and cognitively after the things of nature, but rather it constitutes the science of the suprasensible, of the spirit free from every natural determination.⁷³² Thus, it becomes obvious wherein the goal of this identification of metaphysics and theology lies: in the securing of the spirit in general and God in particular. It is not difficult to see against which adversary this securing is directed in the concrete situation of the 16th century: against the ontological revaluation of nature and the sensible world just taking place, theology holds up the purity and autonomy of the spirit as the only true object of metaphysics. This shows itself even more clearly in the case of a (Neo)Platonist like Patrizzi, who combats the materialistic tendencies of the natural philosophy of the Renaissance and furthermore adopts the strict distinction between the science of being as being and theology; he even regards the identification of metaphysics

⁷³² Vollrath, *Gliederung*, 267; Rompe, *Trennung*, 65 ff., 261.

and theology as the genuine and original Aristotelian position.⁷³³ It is significant that two centuries earlier, when the undermining of the theological hierarchy as a result of the turn to nature and the accompanying autonomization of natural science was just beginning, an anonymous theologian sought to meet the looming danger through a conceptual distinction very similar to that of Pererius. Namely, he based the hierarchy of the branches of knowledge on the hierarchy of beings (material-immaterial) and separated general metaphysics, which he held to be a general introduction to knowledge in the manner of grammar or logic, from special metaphysics, which he placed at the head of all other areas of knowledge (physics, mathematics, politics). For the anonymous author, special metaphysics was metaphysics *par excellence*, since it dealt with immaterial beings; his goal consisted, in other words, in the sharp separation of material and immaterial beings, physics and metaphysics from one another.⁷³⁴

Pererius's distinction between metaphysics (as first philosophy) and theology was bound to evoke dilemmas and aporias. How could first philosophy in the Aristotelian sense *not* be metaphysics? And conversely, how would it be possible to separate theology and metaphysics from one another such that only first philosophy could be designated as metaphysics? The double need to classify metaphysics as first philosophy as well as theology as metaphysics finally called into being the distinction between general and special metaphysics, which will occupy us further below in this section. Even earlier, however, the term "Ontology" had appeared, which offered a way out of the dilemma in its own way, since it permitted a clear distinction between first philosophy (in the sense of the science of being as being) and theology, without the essential relation of both to metaphysical problems having to be contested.⁷³⁵ Significantly, Goclenius, who used the term "Ontology" first, simultaneously adopted Pererius's distinction; for him, ontology meant the philosophical investigation of being as being and it marked the third and highest degree of abstraction from sensible phenomena (the first two were the abstractions of physics and mathematics).⁷³⁶ In the course of the 17th century, the term becomes gradually current, although it is not accepted by those who want to continue designating the investigation of being as being as metaphysics,⁷³⁷ and although it is variously

⁷³³ Rompe, *Trennung*, 97 f. Vollrath (*Gliederung*, 277 f.) traces Pererius' reordering back to purely theoretical considerations, namely to the search for a way out of the aporias of the Aristotelian definition of metaphysics. This, however, can in itself explain neither the reason why this solution was proposed at that concrete intellectual-historical moment, nor the reasons for its later impact.

⁷³⁴ Zimmermann, *Allgemeine Metaphysik*, esp. 191, 195 f., 198 f.

⁷³⁵ Cf. the analysis by Vollrath, *Gliederung*, 269, 278 f.

⁷³⁶ *Lexicon Philosophicum*, 17 (Abstractio). On Pererius' influence see Rompe, *Trennung*, 208 ff.

⁷³⁷ See e.g. Micraelius, *Lexicon Philosophicum*, Col. 804, where ontology is defined as a special philosophical discipline that deals with being in general; subsequently, the opposite view of those who want to continue calling this same discipline "metaphysics" is reported.

modified, e.g., into "Ontosophy".⁷³⁸ Now, the new terminology constitutes an indication of the general reorientation of thought, but not necessarily an infallible guide to the understanding of its concrete content. That which we have called the abortive modernization of scholastic-theological (metaphysical) thought comes to light precisely through the fact that terms which were intended to serve the reconstruction of traditional metaphysics are provided with or at least connected to a new content; thus, for example, as we shall see shortly, ontology transforms itself factually into a logic or epistemology, and then our current terminology, in which the primacy of the ontological question is pitted against the primacy of the epistemological problem, proves incapable of reflecting the most important and significant developments. For the understanding of the latter, the attentive analysis of the thought structure present in each case is required, independent of the terms in which it expresses itself. This applies *a fortiori* to the entire age in question here, since, as we know, Bacon and Hobbes defined metaphysics and first philosophy in essentially new ways. If we therefore take mere terms and not the respective structure and direction of thought as a guide, only confusion can result from the study of that time in the perspective of interest here.

Let us now consider closely how it came about that the just created "Ontology" assumed logical and epistemological tasks, at least to a certain extent. According to Pererius's distinction, immaterial beings or spirits formed the object of metaphysics. First philosophy as *scientia generalis* of being had therefore to formulate categories and concepts that would be valid universally, i.e., for immaterial as well as for material beings. First philosophy (ontology) is thus not interested in the particular constitution of beings and in the hierarchies resulting therefrom, but applies its own concepts to all beings and levels them thereby, in that it arranges them into a common homogeneous framework. Thus the Thomistic view is radically modified, according to which the (fundamentally not denied) common participation of all beings in being did not blur the differences between them, since the designation "being" was not attributed to all beings in the same measure and sense (*univocally*), but according to their constitution (*analogically*), which is why God's privileged position remained unchallenged and no unbridgeable chasm arose between first philosophy (ontology) and metaphysics (theology). Connected with this hierarchization of beings despite their common participation in being was the classification of the sciences based on the degree of abstraction that each of them could achieve with regard to material beings.⁷³⁹ In the light of this criterion, being as being stood on the same level of abstraction as immaterial beings as well, and therefore these two conceptual quantities could either be identified or at least investigated jointly within the framework of a single science (i.e., metaphysics without further specification). In contrast to this view, the advocates of the

⁷³⁸ See e.g. Chauvin, *Lexicon Philosophicum*, 459. The same term is used by Clauberg, of whom we shall speak later.

⁷³⁹ See the classical Aristotelian passages, *Metaphysics*, E 1 and K 7.

distinction between ontology and metaphysics (as theology) avoid the classification of the sciences according to the criterion of the degree of abstraction from the sensible, especially since they do not accept the identification of being as being with immaterial beings. They do this, to be sure, not because of any sympathies with materialism, but on the contrary: since they fear the commingling of immaterial and material beings with one another under the aegis of an undifferentiated being, they regard immaterial beings as the exclusive object of metaphysics and thereby make the realm of theology independent and secure it. The factual result of their undertaking is, however, the complete detachment of the general science of being (thus of first philosophy or ontology) from the investigation of the real constitution of beings. Since metaphysics deals exclusively with immaterial [beings] and since ontology does not deal exclusively with material beings, ontological determinations are applicable to all beings equally and can furthermore, if one no longer speaks of the real constitution of beings, only be purely logical determinations. In other words: in its new definition, ontology finally identifies itself with logic, since it no longer treats of the reality of individual beings, but only of the universally valid concept of being. As a purely logical quantity, being does not constitute the real ultimate source of individual beings (God, moreover, could in no case be derived from being), but the object of a science that, while standing below metaphysics (as theology) in value, must at the same time represent the necessary introduction to all science including metaphysics (as theology).⁷⁴⁰

This turn, which consists in the exclusion of the question of the real constitution of beings from ontology and simultaneously in the transformation of ontology into a logical or propaedeutic science, reflects in an indirect and peculiar way certain shifts in the broader, i.e., also extra-theological, intellectual-historical spectrum. We know that Zabarella's distinction between logic and metaphysics was accompanied by the reduction of the former to a purely methodical organ; and we also know that Bacon entrusted first philosophy and metaphysics on different levels with the tasks of a general epistemology and axiomatics. The advocates of the distinction between ontology and metaphysics arrive for their part, albeit from other motives, at a similar thought structure in which general logical determinations are juxtaposed with real objects of knowledge. The intellectual-historical togetherness of the (scholastic) placing-ahead of ontology and the (profane) placing-ahead of logic becomes visible in the fact that more and more scholastics in the 17th century consider logic an indispensable introductory discipline and want to place it before metaphysics, but also before physics.⁷⁴¹ Some, like Duhamel for instance, openly parallel their own ontology, insofar as it fulfills the function of a general logic, with Bacon's idea of a first philosophy as general epistemology, although of course the main emphasis here falls not on logic or epistemology, but on metaphysics, which now detaches itself

⁷⁴⁰ On the relevant views of Pererius and Goclenius see Rompe, *Trennung*, esp. 69, 83 ff., 208 ff.

⁷⁴¹ Lotz, *Ontologie und Metaphysik*, 11 f.

from its traditional ties to ontology and logic and can assume a purely theological character; the agreement with Bacon is thus only negative.⁷⁴² On the other hand, the eradication of the qualitative determinations of beings within the framework of the new ontology may be seen in its intellectual-historical correspondence to the enforcement of the quantitative mode of consideration in the realm of mathematical natural science. Just as the latter quantified natural factors in order to be able to study their structure and their relations to one another, so too did ontology arrange all beings, from God to the smallest creature, into a single uniform categorical system, eliminating their qualitative differences from one another. If, therefore, the scholastic-Thomistic opponents of new ontology defended the classification of beings and sciences based on the criterion of the degree of abstraction from matter, emphasizing above all the qualitative difference between material and immaterial beings, they were defending the qualitative view against the quantitative, just as they did in their struggle against mathematical natural science.

Although the direct or indirect transformation of ontology into logic and the accompanying quantification of thought reflected more general tendencies, they led nevertheless—corresponding to the ambivalent character of the phenomenon we have called the abortive modernization of scholastic theology—to no approximation to the empiricist and experimental orientation of the new physics, but they effected on the contrary an extreme intensification of intellectualism. For the logicization of ontology resulted, as stated, from the fact that the latter, after its detachment from theology, behaved indifferently toward the real constitution and concrete existence of things as well as toward the question of existence in general. As the science of the logical determinations of being, ontology occupies itself with it in its logical purity, i.e., not in its existential reality, but in its essential possibility: *essentia* displaces *existentia* all along the line, and since *essentia* can be grasped by the intellect, its flawless logical determination is considered sufficient to express its ideal-logical possibility, while its concrete existential reality becomes a mere appendage of that possibility. Since this autonomization of *essentia* and the accompanying intellectualist tendency were connected with the distinction between ontology and metaphysics (as theology), it is not surprising that they announced themselves already in Pererius, who, contrary to Thomas, neither allowed the separation between *essentia* and *existentia* nor regarded the latter as a noteworthy enrichment of the former.⁷⁴³ This intellectualist tendency finds a classic expression, in any case, in Suarez, in whom we also encounter the other aspects of the highly intricate and paradoxical web of thought described here.

⁷⁴² Rompe, *Trennung*, 116 ff., 183 ff.

⁷⁴³ *Op. cit.*, 86 ff., 360.

By distancing himself from the Thomistic view, Suarez does not pose the question of *existentia* at all, which moreover he does not distinguish from *essentia*.⁷⁴⁴ *Essentia* is thus defined in a double way, i.e., negatively (in the sense of the absence of any contradiction in it) and positively (then it is understood as the possibility of a certain *existentia*).⁷⁴⁵ If *existentia* becomes the mere efflux of *essentia*, then it may not be viewed, at least within the framework of ontology, as concrete reality, but rather as a mere concept.⁷⁴⁶ The elimination of concrete *existentia* means that the attribute of being is attributed to individual beings uniformly (*univocally*) and not according to their particular constitution (*analogically*); if this attribute cannot be attributed uniformly, then it may also not claim universal validity.⁷⁴⁷ The object of metaphysics therefore includes God and the remaining immaterial substances, but not only these.⁷⁴⁸ This becomes possible because in the general concept of being both God and creatures are represented not by their real existence, which conditions their differences from one another, but by that which they have in common.⁷⁴⁹ If this is the case, then the division of metaphysics into branches based on the respective choice of a special object is superfluous; for if metaphysics wants to concern itself exclusively with God, it must neglect the common principles of all beings, and conversely: if it limits itself to the latter, then the highest cause of beings and of metaphysical knowledge itself must escape it.⁷⁵⁰ Although this thesis suggests that Suarez remains in the Thomistic framework despite everything, its practical relevance for the systematic development of his metaphysics is nevertheless slight, while his decision to subsume God and creatures under the common denominator of being and to investigate them ontologically accordingly is decisive. His

⁷⁴⁴ Gilson, *Etre*, 147 (cf. 103 on the Thomistic view). Gilson thinks that the reduction of *existentia* to *essentia* brought about a fatal disturbance of the Thomistic equilibrium or the prevalence of that intellectualist tendency which has since often been reproached to scholastic philosophy (*op. cit.*, 152). Siewerth, also a Thomist, expanded Gilson's thesis with rhetorical emphasis and pilloried Suarez as the one primarily responsible for the spiritual decline of Scholasticism (*Schicksal*, passim). Gilson and Siewerth correctly note the reorientation of scholastic thought and Suarez's role in it, but their Thomistic engagement prevents them from a sober assessment of the intellectual-historical necessity of this turn. While they rightly point out that late scholastic metaphysics lost its (theoretical) connection to the concreteness of existence, they do not want to admit on the other hand that scholastic metaphysics could no longer grasp reality because the concept of reality had meanwhile changed radically. Particularly unhistorical and naive is the (otherwise remarkable) analysis by Siewerth, who wants to derive Descartes and all the evils of modern times from Suarez's error. With hardly pardonable one-sidedness, he overestimates the general significance of developments in the fields familiar to him and argues as if he had never heard of the emergence and rise of modern science and modern secular thought. Precisely the prevalence of these modern directions made it historically irrelevant whether the Scholastics thought "correctly" or "incorrectly".

⁷⁴⁵ *Disputationes metaphysicae*, II, 4, 7 = *Opera*, XXV, 89 B–90 A.

⁷⁴⁶ *Op. cit.*, XXXI, 11, 22 = *Opera*, XXVI, 278 B.

⁷⁴⁷ *Op. cit.*, II, 2, 36 = *Opera*, XXV, 81 B.

⁷⁴⁸ *Op. cit.*, I, 1, 26 = *Opera*, XXV, 11 A.

⁷⁴⁹ *Op. cit.*, II, 2, 17 = *Opera*, XXV, 76 A.

⁷⁵⁰ *Op. cit.*, I, 3, 9 = *Opera*, XXV, 24 B–25 A.

ambivalent definition of metaphysics (as the science of being as being and of being under abstraction from matter)⁷⁵¹ seems indeed to imply that special treatment is reserved for immaterial beings and indeed God, but this impression vanishes when we establish that Suarez's view on abstraction from matter relates not only to immaterial beings but also has an additional and completely different sense, which reverses the distinction between ontology and theology. Suarez admits, to be sure, that an object is the more knowable the more immaterial it is—but immaterial objects are for him not only spiritual substances, but also certain quite general concepts (such as being, substance, accident, etc.), which relate now to material, now to immaterial-spiritual substances. If abstraction from matter is addressed in connection with these concepts, it signifies not an ontological datum, but an act of the intellect, i.e., an abstraction of thought. Suarez is content that these concepts can exist even without any connection to any material thing, and therefore he includes them in "Metaphysics" (the term "Ontology" is of course unknown to him) together with those that relate exclusively to immaterial beings.⁷⁵²

The overshadowing of abstraction in the ontological sense by abstraction in the sense of the mere act of thought implies an enforcement of the knowing subject or of thought against the consideration and classification of beings on the basis of their objective (material or immaterial) constitution. The thought of the subject now becomes the decisive moment in the shaping of the knowledge of being, since thought enables itself through its own acts of abstraction to bring all beings, regardless of their real differences from one another, under the common denominator desired by it.⁷⁵³ The victory of the quantitative view seals the competence of thought not merely to grasp the logical determinations of being, but virtually to generate them. From the moment in which ontological data are replaced by a system of logical categories, thought also appears as the source of being and its constitution.⁷⁵⁴ Suarez, moreover, expressly asserts the priority of the principles of cognition over the principles of being, and he even adds that knowledge of real causes and principles is not required for the logically correct grasping of an object or for the finding of logically sound proofs.⁷⁵⁵ Precisely because the order of cognition can differ radically from the order of things, there is also the possibility of a unified treatment of ontologically different objects within the framework of a single science. Regardless of whether the objects of the unified science are given to us by abstraction from matter (if they are immaterial) or by thought-abstraction (if they are material), they are necessarily connected by that logical order on which our certainty of knowledge also rests. As Suarez moreover thinks, the priority of the

⁷⁵¹ *Op. cit.*, I, 3, 1 = *Opera*, XXV, 22 B (*metaphysicam esse scientiam quae ens, quantum ens, seu in quantum a materia abstrahit, contemplatur*).

⁷⁵² Conze, *Metaphysik von Suarez*, 19 ff.; Moser, *Metaphysik*, 29 f.

⁷⁵³ Cf. *Disp. Metaph.*, I, 1, 28 = *Opera*, XXV, 10 A.

⁷⁵⁴ Cf. the (polemical) remarks by Siewerth, *Schicksal*, esp. 119 f., 127 f., 177 ff.

⁷⁵⁵ *Disp. Metaph.*, I, 1, 29 = *Opera*, XXV, 12 A.

logical-cognitive order alone can make the unity of science possible; were the constitution of each being and the special kind of abstraction from matter to be taken as the criterion in every concrete case, then there would have to be as many sciences as beings.⁷⁵⁶ Even if God occupies the most distinguished place among the objects of metaphysics, he nevertheless enters our horizon of thought only through our system of categories, and thus metaphysical knowledge of him transforms itself necessarily into natural-rational [knowledge], i.e., into knowledge that takes place on the basis of certain principles of thought. For in metaphysics as the highest science, the parallel treatment or interlacing of highest being and highest principles is unavoidable, since this science, in contrast to inferior branches of knowledge, cannot borrow its categories from elsewhere.⁷⁵⁷

The priority of acts of thought over the objectively given constitution of things shows itself also in the definitions of the two basic concepts of Suarez's epistemology, namely the *conceptus formalis* and the *conceptus objectivus*. The former is that act (*actus*) or that form (*forma*) of thought by which we perceive an object, the latter is the perceived object itself as it appears in thought by virtue of its said act. The task of metaphysics is the analysis of the *conceptus objectivus* of being, but this depends, as Suarez emphasizes, on the constitution of our cognitive faculty (*ex conceptione nostra*), and therefore the systematic presentation must follow the order of cognition, i.e., start with the *conceptus formalis*.⁷⁵⁸ But even apart from this placing-ahead of the study of cognitive functions, the whole theory of the *conceptus formalis* and the *conceptus objectivus* shows us Suarez's thought from the side of its closest affinity with contemporary secular currents. This affinity is, to be sure, indirect and rather paradoxical this time as well. In contrast to the Thomistic view on the cooperation of intellect and senses, which was valid at least for the middle stages of cognition (since the highest stage, i.e., the knowledge of being, was reserved only for the intellect, while at the lowest stage an independent grasping of the individual sensible object was considered impossible), Suarez believes the intellect can grasp the essence of individual sensible objects and thus move from the lowest to the highest stage of cognition without any assistance from the senses; the senses here represent merely the occasion of the activity of thought and not an objectively indispensable component of at least some phases of the cognitive process. By the intellect generating the various *conceptus objectivus* through its self-activity, it demonstrates its autonomy, which is at the same time an autonomy of its products vis-à-vis the (sensible or suprasensible) objects of knowledge. But precisely the independence from these latter makes the concepts into useful instruments, namely permits them to move and combine with one another at will, to detach themselves from their traditional

⁷⁵⁶ *Op. cit.*, I, 3, 11 = *Opera*, XXV, 25 AB.

⁷⁵⁷ *Op. cit.*, I, 3, 10, cf. I, 1, 19 = *Opera*, XXV, 25 A, 9 A.

⁷⁵⁸ *Op. cit.*, II, 1, 1 = *Opera*, XXV, 65 A.

metaphysical ties and to assume a technical character. Here something emerges that structurally looks very similar to Zabarella's separation of logic and metaphysics.⁷⁵⁹

These are by and large the manifold and intricate bonds that connect the exclusive concentration of metaphysical questioning on the problem of *essentia* with the at least indirect transformation of ontology into (instrumentally conceived) logic. The elimination of the unstable and incalculable *existentia* seemed to enable the formation of a complete and final first philosophy, which would consist of coherent, mutually demonstrating propositions and contain no unclarified concepts.⁷⁶⁰ The eradication of the empiricist component of Thomistic epistemology made knowledge appear as pure production of concepts that can be combined with one another in various ways and for various purposes—according to the dictates of an intellect free from sensory testimony. Once this mind game had established itself, it could obviously be placed in the service of different intentions and assume a different content in each case. Thus, for example, instead of the concepts of scholastic category theory, numbers or figures could be combined with one another in keeping with the spirit of the times. It is no coincidence that Jesuit authors of the 17th century write books increasingly *more geometrico*: it seems as if the initial logicization of ontology became the mathematization of logic in a later phase.⁷⁶¹ The affinity of this (mixed and unclear) method with that of Spinoza, e.g., lets the intellectual-historical significance of these tendencies of scholastic metaphysics be easily recognized. On the other hand, this significance has a merely indicative character; it reflects, that is, in a peculiar way broader developments that were neither rooted in nor influenced by the intellectual-historical phenomena investigated here.

Late scholastic metaphysics found an (if we think of Luther's hostility toward metaphysics⁷⁶² unexpected dissemination in the Protestant area, specifically at German universities; hence arose the tradition from which Wolff also emerged. This dissemination is partly attributable to didactic necessities, partly to the reception of humanism and ancient philosophy; its main reason, however, is to be sought in the theological disputes between Lutherans and Calvinists, in which the Christological question played an important role in its unavoidable connection with basic concepts of traditional metaphysics (essence, substance, etc.). In a time when inner-Protestant controversies were making the Lutheran principle of direct appeal to the Bible for the solution of every arising problem increasingly questionable, Protestant theologians felt the need to return to the objective logical bindingness of metaphysical principles that were

⁷⁵⁹ Cf. the good analysis by Eschweiler, *Phil. d. spanischen Spätschol.*, 276 ff.

⁷⁶⁰ Gilson, *Etre*, 152.

⁷⁶¹ Eschweiler, *Phil. d. spanischen Spätschol.*, esp. 313 f., 317. The author exaggerates when he traces Leibniz's idea of an *ars combinatoria* back to these late scholastic approaches (*op. cit.*, 309 ff.).

⁷⁶² See Ch. I, note 165.

independent of personal experiences and subjective interpretations.⁷⁶³ Many orthodox Lutheran theologians, however, fought against the acceptance of scholastic ideas and the philosophical-metaphysical treatment of theological questions; in this they perceived the hubris, namely the arrogant attempt to press the infinite and incomprehensible God into the limits of rational thought, to subject him to the system of (onto)logical categories and thus to fashion an artificial and cerebral concept of God that would be more or less alien to genuine religious experience.⁷⁶⁴ Critics of scholastic metaphysics such as J. Thomasius reproach it for degrading God, since it does not start from him but must first deduce him from the more comprehensive concept of being. Thomasius also mentions in what (in his opinion bad) way Protestant metaphysicians tried to counteract the dissolution or logicization of God in being: it concerns here the distinction between ontology and metaphysics (as theology) known to us, which many adopted for the safeguarding of God, although they admired Suarez's efforts to preserve the traditional unity of metaphysics.⁷⁶⁵ In this respect, the distinction between ontology and metaphysics (as theology) must be viewed as indirect retrospective confirmation of the Lutheran view on the inevitability of a chasm or conflict between theology and philosophy: in its separation from ontology (as a purely philosophical-rational discipline) and through its identification with metaphysics, theology seems to preserve the desired independence. Despite its theological motivation,⁷⁶⁶ the separation of ontology and metaphysics could not remain impermeable, but was either bridged by the double concept of abstraction, as we got to know it in Suarez, or loosened by the authoritative inclusion of God in ontological concepts.⁷⁶⁷ Understandably, the use of ontological and metaphysical concepts caused great inconveniences for Lutheran theology, in that it diluted or underhandedly modified its actual content.⁷⁶⁸

Historical details interest us here only insofar as they have to do with the formation of conceptual and thought structures. Important in the described development was the fact that the distinction between ontology and metaphysics (as theology) led in varying degrees to the identification of the former with logic, which for its part was meanwhile on the way to mixing with epistemology. Significant for the interlacing of theological-scholastic and modern secular

⁷⁶³ Lewalter, *Spanisch-jesuitische und deutsch-lutherische Metaphysik*, esp. 35 f., 41, 68 ff. Sparn (*Wiederkehr der Metaphysik*, passim) presents the controversial Christological questions in detail. On the historical course of the emergence and dissemination of Protestant Scholasticism see Petersen, *Geschichte*, esp. 277 ff. Weber, *Philosophische Scholastik*, 8 ff., 58 ff.; Wundt, *Schulmetaphysik*, 34 ff.

⁷⁶⁴ On this Petersen, *Geschichte*, 259 ff. (esp. 269, on Schilling's views), 299.

⁷⁶⁵ Lewalter, *Spanisch-jesuitische etc.*, 47 (on Thomasius), 67 f. On the various forms of the separation between ontology and metaphysics among the representatives of Protestant Scholasticism see in detail Rompe, *Trennung*, 199–293.

⁷⁶⁶ Sparn, *Wiederkehr*, 209.

⁷⁶⁷ Wundt, *Schulmetaphysik*, esp. 165, 171.

⁷⁶⁸ *Op. cit.*, 266 f., and above all Weber, *Einfluß*, 144 ff., where the difficulties that the use of late scholastic conceptuality entailed for Protestant theology are illustrated by several examples.

tendencies in this critical point is the influence of Ramus's ideas on the Protestant metaphysicians. As we know,⁷⁶⁹ Ramus regarded Aristotelian metaphysics as disguised logic, and this could be interpreted to mean that metaphysical concepts were basically a matter of logic and therefore metaphysics did not necessarily have to do with theology. If we substitute for Aristotelian metaphysics, as Ramus understood it, ontology as it was conceived after its separation from metaphysics (as theology), then it becomes clear why those Protestant theologians who were interested in a safeguarding of theology against ontology inclined toward the identification of the latter with logic, while they simultaneously rejected any mixing of logic with the theological content of metaphysics and wanted to see in logic a mere methodical instrument.⁷⁷⁰ The belief in the knowability of being by means of the conceptual tools of the new ontology and the accompanying engagement with Suarez's theory of the *conceptus formalis* and the *conceptus obiectivus* simultaneously direct the attention of Protestant metaphysicians and theologians to epistemological questions in connection with the origin and formation of those concepts which are supposed to guarantee the rational grasping of being and predominate in the meanwhile logicized ontology.⁷⁷¹ This new direction appears self-confidently through the creation of new terms such as Gnostology and Noology—and furthermore it exerts a considerable influence on the process of structuring *metaphysica specialis* by ensuring the inclusion of psychology into the same. *Metaphysica specialis*, which in its initial juxtaposition to *metaphysica generalis* (i.e., ontology) was restricted primarily to theology, thereby expands its content in a modern direction and takes an—unintended—step toward its own de-theologization. The next step in the same direction was taken when cosmology was declared the third branch of *metaphysica specialis*.

The interlacing of ontological and epistemological questioning even within the framework of (late)scholastic concepts and classifications shows itself very clearly in Clauberg, who titled his main philosophical work "Metaphysica de Ente, quae rectius Ontosophia" [Metaphysics of Being, which is more correctly Ontosophy]. For Clauberg, being can mean three things. Being is first of all everything that we can think or say.⁷⁷² Second, being is the possible, i.e., not only what we can think or say, but also what can exist, insofar as its concept contains no contradiction.⁷⁷³

⁷⁶⁹ See Ch. I, Sect. 4 c.

⁷⁷⁰ On Ramus' influence see Petersen, *Geschichte*, 298 ff., as well as Wundt, *Schulmetaphysik*, 233.

⁷⁷¹ On Suarez's influence in this regard on Martini see Lewalter, *Spanisch-jesuitische etc.*, 63, Note 1. On the epistemological turn of ontological questions in general see Wundt, *Schulmetaphysik*, 227 ff.; Petersen, *Geschichte*, 315 ff.; Weber, *Philos. Scholastik*, 105 ff. Weber speaks of an "epistemological metaphysics" and regards its representatives as precursors of Kant. Petersen, on the contrary, emphasizes the Aristotelian presuppositions of their thought, while Wundt points to the more modern aspects without overlooking the extent to which the epistemological questions here remain bound to ontology or metaphysics according to scholastic custom.

⁷⁷² *Ontosophia*, II, § 6 = p. 283.

⁷⁷³ *Op. cit.*, III, § 19 = p. 285.

And third, being is things.⁷⁷⁴ The first and most general meaning of being is "confused and incomplete," the third obvious, and therefore Clauberg concentrates his philosophical attention on the second, whereby he demonstrates how much (post)Cartesian epistemological questioning had meanwhile undermined ontological-metaphysical certainty criteria or replaced them with epistemological criteria. As stated, being in the second sense, which Clauberg calls "*aliquid*" [something], is defined on the basis of the criterion of non-contradiction—and Clauberg here questions precisely the (Aristotelian) principle of contradiction or at least its cognitive priority. Most people, he writes, consider as a primary principle that something cannot simultaneously be and not be. Nevertheless, this principle is in reality secondary, namely derived, since it represents the product of a conclusion, specifically of a comparison of the "something" with the correlated concept of "nothing." Furthermore, the principle of contradiction is formulated in negative as well as in compound form (*et... et, aut... aut*), and this likewise indicates that it cannot be the very first principle, which should be affirmative and simple. Such a principle is now precisely the Cartesian *ego sum* [I am], which every philosopher must pronounce or apply at the moment in which he thinks and makes use of his thought. The "*ego*" signifies the intellect which thinks and which constitutes that which is closest to us. On the other hand, the verb "*sum*" designates a first, concrete person, while "*est*" refers to a third person and only vaguely. The terms "*ego*" and "*sum*" therefore form the truly primary, immediately given concepts: for before we think man, we think our own I, and before we think being in its generality, we have thought or perceived this or that concrete being. Not the principle of contradiction, but the *cogito* thus proves the existence of something; the former presupposes the distinction between being and non-being, the latter is completely presuppositionless. Finally, the terms "*ego*" and "*sum*" are much more familiar to us than those that make up the principle of contradiction.⁷⁷⁵

Another variation of the transformation of ontology into logic and epistemology meets us in Henry More. He arrives on his personal path at the identification of metaphysics with theology, namely by striving for the safeguarding of the autonomy of the spirit vis-à-vis nature and the system of mechanical causes, combatting thereby positions of Hobbes and Descartes.⁷⁷⁶ Metaphysics, he writes, is natural theology, i.e., rational comprehension of immaterial substances.⁷⁷⁷ Subsequently, More expresses himself disparagingly about the mixing of logical and metaphysical motifs and concepts in Aristotle (which points, of course, to the continuing

⁷⁷⁴ *Op. cit.*, IV, § 42 = p. 290.

⁷⁷⁵ *Op. cit.*, III, § 26, n. p. = p. 286. Brosch (*Ontologie des J. Clauberg*, 36) thinks that Clauberg's view on the derived character of the principle of contradiction is wrong, since the latter does not emerge from the comparison of being with non-being, but first makes such a comparison possible

⁷⁷⁶ On this see Kondylis, *Aufklärung*, 203 ff.

⁷⁷⁷ *Enchiridion Metaphysicum*, I, § 1 = *Opera*, I, 141.

influence of humanist critique). For in view of his identification of metaphysics with theology, he must bring logic into the vicinity of general ontology. Put differently: being as being is not an object of metaphysics, but of logic, since metaphysics treats only of that which follows physics, while the knowledge of being in general concerns material and immaterial equally and therefore must precede engagement with physics.⁷⁷⁸ Logic thus acquires propaedeutic function and the character of a general methodical organ. More goes a step further, however, by connecting logical concepts with the human perspective of cognition. He is thus not prepared to substitute universals for the reality of concrete individual things. Logic teems, to be sure, with general concepts, but these are not real entities, but only modes by which we grasp things and which are called *λόγοι* in Greek. More's formulation is here unmistakable: the Logoi, i.e., the logical concepts, are the general modes of our mind.⁷⁷⁹ The English philosopher remains, however, far removed from a consistent subjectivization of human knowledge and worldview. Since he believes in the ability of the intellect to grasp the essence of things and denies any agnosticism, he thinks that logical concepts actually relate to being and express it truly. At the same time, however, it becomes clear that the grasping of being is for its part the work of an intellect that possesses the ability to generate (objective) logical determinations.

The distinction between ontology and metaphysics went hand in hand not only with the turn of the former toward logical and epistemological questions, but also with an expansion of the latter, which diluted its originally purely theological character, as the originators of said distinction intended it, and enabled the absorption of secular ideas stemming from the just rising sciences of nature and man; that was the reason why this expansion brought about the fragmentation of metaphysics and caused the original intention of its separation from ontology to be forgotten. If we think of the closed nature of medieval metaphysics, which allowed no conception of a special metaphysics, specifically one dealing with psychology or cosmology, to arise,⁷⁸⁰ then we understand without difficulty that the restructuring of metaphysics in the 16th and especially in the 17th century was not a sign of vitality and inner renewal, but rather of decay of strength and dissolution under the pressure of secular currents. Let us now consider the most important phases of this process. When Pererius made the distinction between ontology and metaphysics (as theology) for the purpose of safeguarding immaterial substances, he used the terms *scientia universalis* (*prima philosophia*) and *divina scientia*. Goclenius retained the same terminology when he introduced Pererius's distinction in Germany, emphasizing at the same time that metaphysics (as theology) was not merely *transnaturalis*, but also *supernaturalis*.⁷⁸¹ The purely theological motivation of the distinction is also shown by the fact that Micraelius,

⁷⁷⁸ *Op. cit.*, II, § 1 = *Opera*, I, 143.

⁷⁷⁹ *Op. cit.*, §§ 3–4 (*Notiones Logicae sunt communissimi Mentis nostrae modi*).

⁷⁸⁰ Zimmermann, *Ontologie oder Metaphysik?*, 354.

⁷⁸¹ Rompe, *Trennung*, 208 ff.

who around the middle of the 17th century replaced Pererius's terminology with the terms *metaphysica generalis* (for ontology) and *metaphysica specialis* which had become current, assigned to the latter exclusively the treatment of immaterial substances. A few decades earlier, Alsted had used the eloquent term *pneumatologia* or *pneumatica* to designate the same subject.⁷⁸² Among the immaterial substances, however, was also the human soul, and the first, initially imperceptible crack in the traditional conception of metaphysics arose precisely through the formation of a special branch of metaphysics dedicated to psychology, whose content allowed itself to be determined increasingly by modern anthropological and epistemological problems, while questions such as the relations of the human soul to other spirits etc. were pushed more and more to the margins.

The second crack in the traditional conception of metaphysics opened up as a result of the expansion of *metaphysica specialis* by another branch of knowledge alongside psychology, namely cosmology. The connection between this metaphysical revaluation of cosmology and the triumphal rise of secular natural science does not need to be specially proven. It must be noted, however, that the expansion of *metaphysica specialis* was considerably facilitated by the gradual elimination of the scholastic-Aristotelian close connection between the degree of abstraction from matter and the epistemological status of an object; this elimination meant concretely that there was no longer any reason to regard exclusively as metaphysics that science which abstracted completely from matter by concerning itself only with immaterial substances.⁷⁸³ The renunciation of the criterion of abstraction from matter showed in itself clearly the extent and the consequences of the ontological revaluation of nature or the material world, so that the inclusion of cosmology in *metaphysica specialis* became unavoidable. In the realm of metaphysics, the general development is reflected in a distorted way, to be sure: those elements that become independent in the realm of secular thought and can unfold precisely because of their detachment from metaphysics are revalued in the realm of metaphysics through their inclusion in it, which results in their own falsification as well as the falsification of metaphysics itself. But such complicated and contradictory phenomena are not rarities in intellectual history.

While the inclusion of psychology in *metaphysica specialis* had its scholastic precedents, which rested on the assumed close relationship of the human soul with other immaterial substances, cosmology was first declared a branch of *metaphysica specialis* by Wolff. Wolff himself does not use the terms *metaphysica generalis* and *specialis*, but follows traditional usage in this question and subsumes under metaphysics ontology as well as pneumatology and cosmology; the practical difference from the innovative classifications discussed above is, however, slight. The

⁷⁸² On Micraelius and Alsted see Vollrath, *Gliederung*, 269 (with documentation).

⁷⁸³ Cf. Conze, *Metaphysik von Suarez*, 65.

influence of mathematical natural science on the final structure of *metaphysica specialis* becomes visible in the fact that Wolff thought of the Cartesian trinity of substances when he enriched this new division of metaphysics with cosmology. And just as with Descartes mathematical natural science differs fundamentally from the mere empirical study of natural bodies, so too with Wolff cosmology and physics in the narrower sense do not coincide, but relate to one another as ontology as the science of the general determinations of being relates to the other sciences.⁷⁸⁴ Cosmology, in other words, treats nature (phenomena) on the basis of (onto)logical criteria, and therefore it can be integrated into metaphysics without difficulty. This intellectualist view of nature results consistently from Wolff's conscious continuation of Suarez's approach: *essentia* here completely overshadows *existentia*.⁷⁸⁵ Wolff's cosmology, however, interlaces not only with his ontology, but just as much with his theology, by serving as an (additional) proof of God. That was perhaps the reason why Wolff could believe that by including cosmology in metaphysics he was strengthening the position of God. Yet the impression was deceptive. For as soon as psychology and cosmology became independent branches of *metaphysica specialis*, the original meaning of the distinction between the latter and ontology or *metaphysica generalis* changed. While the said distinction aimed at safeguarding God against being as being and against individual beings, he finally became, within the framework of *metaphysica specialis*, one object of metaphysics among others. What he had gained by the separation of ontology and metaphysics, he loses again through the expansion and fragmentation of metaphysics. The fate of God, which could not remain without consequences for the fate of metaphysics either, was however not decided by this process, and indeed not least because precisely at that time the true enemy appeared on the horizon: the abolition of the distinction between the Beyond and the Here and Now, at least in its traditional form.

⁷⁸⁴ Vollrath, *Gliederung*, 280 ff., 260 ff.

⁷⁸⁵ See the analysis by Gilson, *Être*, esp. 169.

III. The Recapitulation, Radicalization, and Typological Enrichment of Anti-Metaphysical Thought in the Age of Enlightenment

1. General Remark

To explain the formation of anti-metaphysical thought in the Age of Enlightenment satisfactorily, we must first properly grasp the character of what has been called the Enlightenment, especially since legends and misunderstandings still prevail regarding it.⁷⁸⁶ The viewpoints essential to our inquiry can be summarized as follows. In the Age of Enlightenment, the ontological revaluation of the sensible world, which had already been pitted against theological spiritualism in the early modern period, reaches its peak. As we know,⁷⁸⁷ the mathematical natural science of the 17th century rejected a fundamental position of traditional metaphysics—namely, that the sensible world was ontologically inferior, i.e., imperfectly structured and therefore, unlike the sphere of the transcendent spirit, incapable of rational comprehension—and conceived of nature as a system of strictly lawful relations that could be grasped and formulated logically and mathematically; for this reason, nature constituted not the object of an inferior discipline compared to metaphysics, but the object of science *par excellence* (in the modern sense of the word). The mathematical natural science of the 17th century, however, had not directly challenged the sphere of the transcendent spirit, since God remained the Creator and Author of the motion of the world-machine; the separation of the Beyond and the Here and Now was thus not abolished, although it now had to assume a new form. In the Age of Enlightenment, a further step is taken: nature is not only viewed as a unified and homogeneous whole, but self-motion, thus ontological autarky, is attributed to it. The idea of self-moving matter gains more and more ground, not least thanks to the radiation of the young biological sciences, with which the representatives of materialistic tendencies are in particularly close contact; the consequence of this was the increasing elimination of 17th-century mechanism in favor of a dynamic, indeed vitalistic conception of the natural world. Above all, the Cartesian version of mechanism is rejected, which was connected with an intellectualist attitude that could not be accepted by most empiricist-oriented enlighteners. Newtonian physics, and especially the theory of attraction, is on the contrary often interpreted as confirmation of the existence of immanent forces in matter that generate motion.

For obvious reasons, the ontological revaluation of the material world has been devastating for the neuralgic traditional metaphysical distinction between spirit and matter, i.e., ultimately for the distinction between the Beyond and the Here and Now itself. For the first time in intellectual history, this distinction (at least in its conventional form) was fought so openly, so consciously, and with such consequences. Its denial implied, of course, the total denial of (traditional)

⁷⁸⁶ On this see Kondylis, *Aufklärung*, passim. The following paragraphs are based on the results of this work.

⁷⁸⁷ See Chap. II, Sect. 1.

metaphysics, which now stood without theoretical supports and appeared as a grave error, a logically incomprehensible aberration of the mind. What appeared logically monstrous had to be explained historically and sociologically. It is no coincidence that those who strove most persistently and consistently for such an explanation of the metaphysical phenomenon are to be found among those who most decisively contested the separation of the Beyond and the Here and Now: meant here are, of course, the materialists. Their historical-sociological explanation of metaphysics was linked, however, with their critique of religion, and therefore it was also shared to a certain extent by some enlighteners who were not materialists or atheists but who, like Voltaire, sharply criticized established Christianity. From this standpoint, metaphysics is viewed as an outgrowth or philosophical processing of religion, fulfilling similar social functions: it is meant to instill awe of supernatural beings who sanction the rule of priests and despots.

However, materialism remained, at least statistically, rather a marginal phenomenon in the intellectual spectrum of the Enlightenment; the open rejection of the separation of the Here and Now and the Beyond remained correspondingly limited. The great majority of enlighteners accepts the traditional connection between the idea of spirit and ethical norms, and therefore does not want to eliminate the sphere of the transcendent spirit and the Transcendent in general completely; they even fight materialism vigorously because they believe that it hands welcome weapons to the theological enemy. In their two-front war against theology and materialism, they cannot, however, use the anti-metaphysical arguments of the latter, nor can they identify their adherence to the idea of the Beyond with a confession to traditional theological metaphysics, the defeat of which was, after all, a matter of life and death for the Enlightenment. As a way out of this dilemma, agnosticism offers itself once again, which possessed the additional advantage of being a weapon proven for centuries, one that could be put into a fideistic shell so as not to expose itself to theological attacks. For these reasons, agnosticism remains the anti-metaphysical basic attitude in the Age of Enlightenment as well, i.e., the attitude of the vast majority of (more or less) moderate enlighteners. Agnosticism benefited from the enforcement of empiricist epistemology in the 18th century, which could be interpreted, similar to earlier times, to mean that human cognitive faculty is limited, i.e., incapable of crossing the horizon of knowledge traced by the senses. Empiricist epistemology could furthermore be combined with a critique of all kinds of abstraction, which seemed to favor the formation of metaphysical terminology. And the critique of abstractions paved the way for language critique.

The close connection of Enlightenment agnosticism with empiricist epistemology suggests the reason why epistemological questions clearly predominate in the field of philosophy in the 18th century: since being as being and immaterial substances are held to be unknowable, attention

turns to the mechanisms of cognition, both as subjective experience and as science. This enforcement of the primacy of epistemology also makes understandable the widespread dissemination of the Baconian reinterpretation of the term "metaphysics"; "metaphysics" henceforth increasingly means general epistemology or theory of knowledge. But the enforcement of epistemology over traditional metaphysics and ontology represented for its part the consequence of a more extensive worldview shift, which could be briefly described as the replacement of God and Theology by Man and Anthropology. The primacy of anthropology implies ultimately that the so-called Being constitutes a function, if not a product, of human cognitive faculty. The same now seems to apply to traditional metaphysics (as theology and as ontology) itself: metaphysics does not explain man, but it must itself be explained as a mental phenomenon in the perspective and on the basis of the data of anthropology. The anthropological consideration of metaphysics, which alongside the historical-sociological one constitutes the typological contribution of the Enlightenment to the critique of metaphysics, thus takes shape in the closest connection with the fundamental worldview approaches of the Enlightenment, which continue to strengthen in the 19th and 20th centuries, resulting in a deepening of anthropological (and sociological) critique of metaphysics.

2. The Dissolution of Substance

The most important event in the history of the substance problem up to the threshold of the Enlightenment is undoubtedly the eradication of the so-called second substance. This was the final result of the long joint struggle of Nominalism, Humanism, Renaissance natural philosophy, and mathematical natural science against the scholastic-Aristotelian view on the relations between logic and metaphysics, or against the doctrines of species, genus, and *forma substantialis*. Concretely, the eradication of the second substance meant that the constitution of the substance as such was no longer influenced by factors standing outside of it, which lent it shape, form, and thus coherence and unity. The consideration and evaluation of the (concrete) constitution of the (concrete) substance from the perspective of such supra-individual general factors permitted its classification into species and genus, and therefore its definition in the Aristotelian sense—which in turn enabled the construction of a hierarchy of substances and the entire interlacing of logic, physics, and metaphysics. But what remained of the substance after its detachment from abstract and general quantities, i.e., from the supra-individual concepts of species and genus, which as circumscriptions or bearers of the second substance gave form to the individual first substance? Substance is now increasingly conceived as Sub-ject, i.e., as the bearer of various attributes. But as soon as substance and Sub-ject approached each other so closely that they became (almost) identical, matter—that dark and indeterminate bearer of attributes—had to be declared substance. Aristotle had already foreseen that the identification of substance with the Sub-ject would amount to the identification of substance and matter.⁷⁸⁸ As an enemy of materialism, he naturally wanted to prevent this double identification; its dissemination in the 16th and 17th centuries constitutes, conversely, a sure sign of the ontological revaluation of the material world at the expense of the traditional spiritualistic hierarchy of substances. Although in the mentioned period the term "substance" does not designate exclusively material, but also immaterial [substance] (we need only think of the terminology of Descartes or Malebranche), it is nevertheless obvious that the relation between Sub-ject and attributes acquired its full theoretical, but also experimental interest above all when it was discussed within the framework of the new scientific problems, specifically with regard to the distinction between primary and secondary qualities.

The eradication of the second substance and the resulting approximation, if not identification, of substance, Sub-ject, and matter (or rather what Aristotle called first matter) forms the logical and intellectual-historical starting point for the investigation of the substance problem in the Age of Enlightenment. To anticipate the essential point: precisely because the question of substance had meanwhile been reduced to the question of the relations between Sub-ject and attributes, the next step consists in the elimination of the Sub-ject and the comprehension of

⁷⁸⁸ *Metaphysik*, 1029; cf. Janke, *Leibniz*, 17 ff.

substance as a mere sum of attributes; and precisely because substance (or the Sub-ject) was viewed primarily as matter, this step was taken by someone who was an enemy of matter and materialism, namely Berkeley. He turned against Locke because he believed that in the work of his famous compatriot the interweaving of substance and matter had become all too close (and all too dangerous). This impression was not wrong. It is indeed quite misleading to consider Locke a more or less conservative continuator of Aristotelian-inspired questions about substance merely because he accepts the existence of real substances with (partially) knowable constitution.⁷⁸⁹ For the traditional doctrine of substance was shaken not first by Berkeley (and Hume), but already when substance, subject, and matter were brought closer together or identified.

Locke stands roughly in the middle of the path that begins with the scholastic-Aristotelian concept of substance and ends with the denial of any substance, as formulated by Hume. The tangible materiality of substance (if one may express it so) is asserted by Locke when he writes, for example, against Descartes, that the essence of material bodies is not extension, but an "extended solid thing" as the unknown cause or basis of the union of our simple ideas; when we speak of substance, he then adds, we automatically include in this concept, besides the sum of our simple ideas, also the known bearer of the sensible qualities corresponding to them.⁷⁹⁰ The significance Locke attaches to *solidity* as a fundamental property of bodies⁷⁹¹ forms further evidence for his view of the materiality of substance. Solidity is, one could say, the most elementary empirical proof of the existence of material substances. Therefore, it is counted by Locke among the primary properties of bodies, although its reality cannot be established by two senses simultaneously (like the reality of the remaining primary properties), but only by one (like the reality of secondary properties); if Locke, unlike Berkeley, shows himself ready to make this exception, the reason is certainly his belief in the existence of material substances as Sub-jects.⁷⁹² Furthermore, Locke is clear that the identification of substance with the material Sub-ject goes hand in hand with the eradication of the second substance, i.e., species and genus. As he writes, the concept of substance is used correctly when we mean by it the real internal, albeit generally unknown, constitution of things, upon which their unknown properties depend; but it is superfluous and absurd if it is intended to express not the real constitution of things, but the fictitious constructions of species and genus.⁷⁹³ The rejection of universal and abstract concepts is consciously linked with this substantial change in the concept of

⁷⁸⁹ This is the incorrect opinion of Leyden, *Metaphysics*, 147 f.

⁷⁹⁰ *An Essay concerning Human Understanding*, III, 6, 21; II, 23, 3.

⁷⁹¹ *Op. cit.*, II, 4, 1.

⁷⁹² See the analysis by Armstrong, *Metaphysics*, 85 f. Armstrong (88 ff.) rightly emphasizes the connection between this belief of Locke's and his epistemology, especially with regard to the rejection of innate ideas.

⁷⁹³ *Essay*, III, 3, 15, and 17.

substance.⁷⁹⁴ This involves, of course, a connection that those humanists who took the field against abstract concepts in the 15th or 16th century could not yet have suspected.

With regard to the later development of the substance problem, it is noteworthy that Locke sometimes speaks as if substance or the Sub-ject were a mere creation of our linguistic habits and its assumption purely hypothetical. This tendency becomes visible, for example, where Locke describes the origin of the idea of substance: we notice that certain simple ideas always accompany one another and then we ascribe them all to a single thing and unite them under a common name; since we cannot imagine that simple ideas float in the air, we are accustomed to *suppose* a Sub-ject or substrate of them.⁷⁹⁵ But if substance is assumed only hypothetically⁷⁹⁶ because we cannot imagine its absence, then its assumption follows from negative rather than positive indications. The counterpart of this hypothetical assumption of substance is the thesis of its unknowability. The name we give to substance should not mislead us in this regard, as it does not refer to anything unambiguous; although it appears as a simple term, it is in reality complex, for it comprises a quantity of attributes and simple ideas corresponding to them.⁷⁹⁷ Precisely because what we call substance represents a sum of simple ideas, our grasp of substance must be false if we include more or fewer ideas in this sum than those that actually belong there. On the other hand, we can rarely be sure that our ideas of a substance correspond to its true constitution. The knowledge of substances always remains precarious and incomplete, although it does not lack a certain objective basis.⁷⁹⁸ As soon as we want to go beyond simple ideas and penetrate to the core of things, we encounter an impenetrable obscurity and must once again acknowledge our ignorance; simple ideas thus prove to be the ultimate limits of our certain knowledge.⁷⁹⁹

Since the knowledge of the objective constitution of things (or their *real substance*, as Locke expresses it) is inaccessible to us, we necessarily restrict ourselves to a reconstruction of substance based on available sensory data; the product of this reconstruction is the *nominal substance*.⁸⁰⁰ This is indeed a complex idea; but the properties that constitute the components of this idea are borne by something other than what we call the nominal substance—by something whose eventual knowledge would force us to substantially modify our conception of the substance of the respective thing.⁸⁰¹ Be that as it may, as long as real substance remains

⁷⁹⁴ *Op. cit.*, III, 3, 11–13; cf. IV, 6, 4.

⁷⁹⁵ *Op. cit.*, II, 23, 1.

⁷⁹⁶ The verb "suppose" is emphatically repeated in the following paragraphs.

⁷⁹⁷ *Op. cit.*, II, 23, 14.

⁷⁹⁸ *Op. cit.*, IV, 4, 11–12; cf. IV, 6, 10 and 13.

⁷⁹⁹ *Op. cit.*, II, 23, 32 and 37.

⁸⁰⁰ *Op. cit.*, III, 6, 2.

⁸⁰¹ *Op. cit.*, III, 6, 3.

unknowable, reference to it cannot provide a standard for ontological classifications in which species and genera are hypostatized; species and genera, remarks Locke against Aristotelian scholasticism, should be formed on the basis of nominal substances, i.e., ultimately on the basis of sensory data known to us, whereas the so-called *formae substantiales* etc. are meaningless and moreover misleading.⁸⁰² Since nominal substance is in a certain respect a conventional mental construction, it varies from person to person: everyone connects something different with it, i.e., a different quantity of simple ideas, so that intersubjective understanding can only be approximate; this, however, also has an objective reason, i.e., the fluid character of the boundaries between different species and genera.⁸⁰³

To better understand Berkeley's critique of Locke, we must briefly go into the relation between the theory of substance and the distinction between primary and secondary properties. As is well known, Locke calls those properties primary which belong to a body always and independently of its respective state, such as solidity, extension, form, etc. Secondary are called properties which are not in themselves present in a body, but represent *powers* of bodies and go back to the constitution of the primary properties of the same; thanks to these powers, sensations of colors, smells, etc. arise,⁸⁰⁴ although we do not know exactly how this origin takes place concretely, the effects of which are familiar to us through daily experience.⁸⁰⁵ It is obvious that primary properties are much more closely connected with the substance of bodies than secondary ones; that is why, incidentally, ideas of primary properties are likenesses (*resemblances*) of bodies, corresponding to their real constitution, which is not the case with ideas of secondary properties.⁸⁰⁶ The connection of primary properties with (material) substance is, however, neither unambiguous nor does it permit us to clarify the constitution of the latter directly. For even with regard to primary properties, we must distinguish between their concretely perceptible and their general and imperceptible aspect.⁸⁰⁷ While form in the general sense of the word represents an indispensable property of bodies, it appears on the other hand always as a concrete, for instance round, square, or polygonal etc. form; the same applies to solidity, which we do not experience absolutely, but always as a certain degree of solidity, or to motion, which always exhibits a certain speed, etc. Primary properties are thus perceived by us

⁸⁰² *Op. cit.*, III, 6, 7–10 and 24.

⁸⁰³ *Op. cit.*, III, 6, 26 and 30.

⁸⁰⁴ *Op. cit.*, II, 8, 9–10. These definitions suggest that a strict distinction must be made between the properties of bodies and the ideas that these properties awaken in our mind. Secondary qualities are therefore not, for instance, the green color, the warmth, or the bitterness, but the powers that produce these properties and in turn go back to the primary properties of the bodies. Locke (*op. cit.*, II, 8, 8) draws attention to this important distinction, but at the same time admits that he often uses the term "idea" improperly to denote not sensory or ideal quantities, but properties of bodies (cf. below note 23).

⁸⁰⁵ *Op. cit.*, IV, 8, 28.

⁸⁰⁶ *Op. cit.*, II, 8, 15.

⁸⁰⁷ Cf. Jackson, *Locke's Distinction*, esp. 60 f., 64 f.

only as concrete properties or as properties of the perceptible parts of bodies; they remain unknown and indeterminate to the extent that they are intertwined with the imperceptible parts of bodies. Beyond the line that separates the perceptible parts of bodies from the imperceptible, a dark zone begins, about whose content we can state nothing definite, although we suspect that somewhere in this area the presumed interlacing of substance and primary properties takes place. If substance is, as stated, an *extended solid thing*, then this "thing" remains outside our cognitive capabilities, even if solidity and extension (always in some concrete degree or some concrete form) are familiar to us. In other words: the solidity and extension as we know them are not the solidity and extension of *that* "thing". On the other hand, however, we sense that the "thing" is intertwined with the primary properties in some enigmatic way.

As we see, Locke's thought moves on different levels simultaneously, which we must keep apart, despite the fact that he often uses unclear language and concepts, thereby making his own distinctions precarious. Berkeley is now not interested in fixing these distinctions once and for all, but rather in abolishing them and thereby leveling and unifying the entire area lying between substance and secondary properties.⁸⁰⁸ For this purpose, he utilizes the mentioned (partial) interlacing of substance and primary properties, and he ends with the transformation of substance into a sum of sensible properties, having previously brought the ideas of primary and the ideas of secondary properties under a common denominator. Anyone who distinguishes primary and secondary properties from one another, writes Berkeley, claims that our ideas of secondary ones do not represent likenesses of a thing independent of our perception and thought, whereas conversely our ideas of primary properties depict something objectively given, i.e., matter. Matter is therefore an unconscious and inert substance in which primary properties are actually present. These same properties exist, however, on the other hand as ideas in the mind, and since an idea can only be like another idea, the ideas of primary properties cannot depict matter, which in itself has no ideas. Material substance is a contradiction in itself, since its existence is grasped (or at least inferred) through ideas, without it being capable of generating or receiving ideas.⁸⁰⁹ If we assume that secondary properties exist only in the mind, and if we simultaneously accept their inseparable unity with primary ones, then we must admit that the latter also exist only in the mind—which for Berkeley means: can only be perceived by the mind. Practically, it is impossible to distinguish these from those by abstraction, to imagine, for example, extension without color.⁸¹⁰ And if the mutability and

⁸⁰⁸ Connected with this is the fact that he confuses the distinction between substance and attributes with that between the real and phenomenal world, and this latter distinction in turn with that between primary and secondary qualities; see on this Bennett, *Substance*, esp. 94 ff., 117 f., 122 f. Bennett finds this confusion already in Locke, specifically in his ambivalent use of the term "idea" (see above note 19).

⁸⁰⁹ *A Treatise concerning the Principles of Human Knowledge*, § 9 = *Works*, II.

⁸¹⁰ *Op. cit.*, § 10.

relativity of secondary properties proves their dependence on the respective subjective perspective, why should not the same apply to the form or extension of bodies?⁸¹¹

The impression would be wrong that Berkeley practices an immanent critique of Locke or formulates his own theses by identifying weaknesses or internal contradictions in Locke's theory. In reality, his critique already presupposes the fundamental conviction that *esse* and *percipi* are identical—a conviction, moreover, that is declared⁸¹² even before Berkeley proceeds to refute the distinction between primary and secondary properties. Only through the identification of *esse* and *percipi* does the absorption, so to speak, of material substance into its primary and perceptible properties become possible (contrary to Locke's view). Regardless of whether Berkeley understands Locke correctly or not, he can only confront him in this way once he decides to declare the imperceptible to be non-existent. How then can material substance be considered existent if it cannot be perceived?⁸¹³ And does attributing only negative attributes to it not amount to an attempt to describe non-being? Whatever may be predicated of material substance as a bearer of properties is meaningless, since it presupposes that there can be something outside the mind or perception.⁸¹⁴ Elsewhere, Berkeley seems to adopt Locke's previously mentioned conjecture that we only assume a material substance because we otherwise could not imagine what carries the accidents.⁸¹⁵ The theoretical gain of such an assumption is minimal, however, for it makes little sense to say, for example, that matter carries extension. Even if we do not know what matter is, we should at least know wherein its relationship to its accidents consists.⁸¹⁶ Such a relationship, however, we cannot perceive.

Berkeley fights the idea of a material substance so persistently precisely because he knows all too well that the development of scientific and philosophical ideas in the 17th century had favored the ontological revaluation of matter in general. Since he is hostile to scholastic-Aristotelian philosophy, he cannot discover that this development was necessarily connected with the theoretical defeat of scholasticism and the eradication of the second substance; therefore, he summarizes its final result in the words that contemporary doctrines of material substance would closely resemble the Aristotelian conception of *materia prima*.⁸¹⁷ By not being able or willing to admit that the real Aristotelian position on this question, namely the distinction between substance and matter, aimed precisely at the refutation of materialism, he does not return to Aristotelianism to combat the consequences of the new tendencies, which in

⁸¹¹ *Op. cit.*, § 14; Berkeley himself restricts the validity of this argument in the next paragraph.

⁸¹² *Op. cit.*, § 6.

⁸¹³ *Op. cit.*, § 68.

⁸¹⁴ *Op. cit.*, § 17.

⁸¹⁵ *Op. cit.*, § 74.

⁸¹⁶ *Op. cit.*, § 16.

⁸¹⁷ *Op. cit.*, § 11.

his pious eyes were fatal, but decides on a solution that we could call flight forward. The radicality and originality of this solution, regardless of its worldview motivation, becomes clear when we consider that no one until then had rejected the assumption of a substance *in toto*, although recent developments had forced this assumption to be considerably modified. For Berkeley, therefore, there can be no substance in the sense of a Sub-ject, i.e., a bearer of accidents or properties that exist independently of the mind or perception. If the term "substance" is to continue to have a sense, then it can only mean a combination or sum of perceptible properties;⁸¹⁸ thus a cube, for example, consists in nothing other than what traditional terminology called its modes or accidents.⁸¹⁹ While the views of the scholastics and Locke's positions on the question of substance (Berkeley largely identifies both with one another, as mentioned) have no concrete content, the reduction of substance to its perceptible properties constitutes basically only a confirmation of the common conception regarding this.⁸²⁰ No man thinks of attributing to things something he cannot perceive in them. Berkeley by no means wants to question the reality of our daily perceptions or the world surrounding us; he only denies that this reality rests on a material substrate that lies beyond all perception and is independent of it.⁸²¹ Precisely for this reason, he does not have the feeling that his philosophical mode of observation runs counter to modern natural science. Moreover, he thinks natural science does not interpret any phenomenon on the basis of the assumption of matter; anyone who sets out to explain natural phenomena speaks not of matter, but of its properties.⁸²² His own goal is accordingly the detachment of metaphysics (as he understands it) from scholasticism and its connection with the sciences, which, after their liberation from the burden of traditional concepts, might look forward to a new flowering period.⁸²³

Berkeley's impression that the rejection of material substance would be rather useful to natural science was reinforced by the theoretical coupling of this rejection with the fight against abstractions. Mental abstractions appeared necessary for grasping substance, i.e., that which could not be grasped by sensory ideas, since it was thought to be located behind or under those qualities to which sensory ideas referred. The assumption of a substance thus rested on the assumption of logically and really valid abstract ideas. We set up an abstraction, for example, when we assert the presence of extension outside of perception or thought and independent of them: since our mind always perceives a concrete extension, extension as such and without further determinations can only be the product of an abstraction process.⁸²⁴ Precisely in the

⁸¹⁸ *Op. cit.*, § 37.

⁸¹⁹ *Op. cit.*, § 49.

⁸²⁰ Notebook A = *Works*, I, 88. On substance as the sum of simple ideas, K.S. 24, 64 in the same volume.

⁸²¹ Cf. *Principles*, §§ 35 ff.

⁸²² *Op. cit.*, § 50.

⁸²³ Notebook B = *Works*, I, 27. Cf. below p. 299.

⁸²⁴ *Principles*, § 11.

belief in the capacity of thought to form valid abstractions, Berkeley sees the main source of all errors in the field of logic and metaphysics. The generally accepted and practiced way of forming abstractions, i.e., the isolation of common qualities and their unification in a single concept, puts a construction into the world that can actually hardly be grasped intellectually, since it provides us with no concrete point of reference to appropriate its (alleged) content. That which we grasp always has certain qualities and cannot be thought at all without them; and even if certain qualities can be separated and isolated from others, this is not possible with all of them. Abstract ideas are therefore empty and moreover misleading; quite apart from the fact that they are familiar only to an educated minority, they contribute neither to the expansion of our knowledge nor to the improvement of human communication.

Berkeley clarifies that he turns only against abstract general ideas as well as against those general ideas that come about when we transform a word into a sign that can contain a certain number of concrete ideas and recall one of them to memory each time.⁸²⁵ The replacement of the theory of abstract ideas by a sign theory, however, does not eliminate the difficulties Berkeley established in connection with the former; for the sign theory presupposes, just like the theory of abstract ideas, the assumption of (qualitative) similarities between different things.⁸²⁶

As already noted, Berkeley wants to combat materialism effectively and finally through the dissolution of material substance. His goal as a theologian remains the securing of the ontological independence or rather the ontological sole rule of the spirit. The question that arises here is whether the critique of the concept of material substance must *ipso facto* flow into a critique of the concept of substance in general, which would be equally fatal to the assumption of a spiritual substance. Berkeley is of the opinion, of course, that this is not the case. The concept of material substance is for him inherently contradictory because, if we presuppose the identity of *esse* and *percipi*, we cannot assume the presence of ideas in something that possesses no faculty of perception. This contradiction does not burden spiritual substance, in which ideas can be present precisely because the corresponding faculty of perception is there. In addition, ideas are in themselves passive or inert, such that only the spirit can come into question as the sole cause of their origin and constant change, which is simple, indivisible, active, and immediately perceptible—not through the effect of ideas, but thanks to its self-reference (*reflection*).⁸²⁷ Notwithstanding these differences, the question remains whether the same structural relationship can be stated between the spirit and (its) ideas as between material substance and its accidents. If the spirit forms the substrate or the support of ideas (Berkeley

⁸²⁵ *Op. cit.*, Introduction, §§ 6–15.

⁸²⁶ On this see Armstrong, *Metaphysics*, 125 ff., 135 ff. A critical analysis of Berkeley's sign theory and its ambiguities is offered by Johnston, *Development*, 182 ff., cf. 209 ff.

⁸²⁷ *Principles*, §§ 7, 25–27, vgl. 142; *Three Dialogues between Hylas and Philonous*, III = *Works*, II, 282 ff.

repeatedly uses the terms *substratum* and *support* to designate this function of the spirit), then the relationship of spirit and ideas to one another must be explained and the question answered whether the spirit can be thought independently of its ideas: as we shall see shortly, Hume denied this. The view that for Berkeley spiritual substance is not a substrate, but an active cognitive, volitional, and organizing principle or immediate intuitive perception, which "supports" ideas only in the sense that it perceives them,⁸²⁸ encounters considerable difficulties. For to gain the concept of spirit in itself and in general, it is not sufficient to attribute this or that concrete perception to the spirit (in this case the concept of spirit would change according to the perception attributed to it), but one would have to attribute to it perception as such, thought as such, and will as such, i.e., without any concrete reference and content. Such a perception, such a thought, and such a will would, however, represent similar abstractions to those Berkeley rejected when he contested the existence of material substances.⁸²⁹ It seems as if Berkeley, to escape theoretical embarrassment, had flirted with the thought of eradicating spiritual and material substances equally. At least in his philosophical notebooks, he remarks that the spirit does not exist outside its perceptions and that, if we did not want to conceive it as a sum of perceptions but as that thing which perceives, we would then fall victim to the words "that" and "thing," which suggest a hypostatization.⁸³⁰ Berkeley's theological conscience obviously forbade him to take a further step in this direction, although he knew of this theoretical possibility. Were he logically consistent, he would have had to arrive at the position of Hume or Russell. These took no consideration of theology, whereas the theological consequences of the dissolution of spiritual substance were unacceptable to Berkeley.⁸³¹ He therefore sticks to its assumption, and indeed not only for the purpose of securing the doctrine of the immortality of the soul, but also for another reason: he varies, namely, Malebranche's thought of the vision of all things in God and presents God as the coordinator of the ideas of all finite spirits.⁸³²

Berkeley's philosophical approach illustrates vividly the fate of worldview positions in the time of their decline. In the struggle for survival, they attempt to renew themselves through the use or even radicalization of the most modern concepts, in the hope that the transfer of old contents into a new form or the sacrifice of certain aspects of the old contents accepted in the process will theoretically disarm the opponent. This strategy can—if at all—have only short-term success. For the modernization of form objectively undermines an old content, which becomes visible above all when an opponent of the old deploys against it precisely those elements that its defenders had worked out for its more effective protection. This happens in the transition from

⁸²⁸ As Tipton assumes, see *Berkeley's View of Spirit*, esp. 66 f., 70.

⁸²⁹ Datta, *Berkeley's Objective Idealism*, esp. 119.

⁸³⁰ *Philosophical Commentaries* (= *Works*, I), No. 580, 581; cf. No. 637, 658, 701, 777, 829, 871.

⁸³¹ Warnock, *Berkeley*, 196 f.

⁸³² On Malebranche's influence on Berkeley see in detail Luce, *Berkeley and Malebranche*, esp. 70 ff., 143 ff.

Berkeley to Hume. The dissolution of substance, with the help of which Berkeley wanted to settle materialism once and for all, is asserted by Hume also with regard to spiritual substances, which was bound to entail fatal consequences for the theological concept of the soul. Berkeley's argumentation against material substance is now fielded against substance in general and as such. The idea of substance, writes Hume, cannot stem from sensory impressions, since substance is neither color nor sound nor smell. On the other hand, spiritual impressions (*impressions of reflections*) can be traced back to passions or emotions, which can just as little represent a substance. Therefore, we have no other idea of a substance than that of a sum of concrete properties. The idea of a substance forms, in other words, a sum of simple ideas that are connected with one another by the imagination and to which a common name is assigned so that they can be recalled at any time as a unity. Sums of simple ideas are likewise the modes (*modes*). The difference between the idea of a substance and that of a mode consists in the fact that the connection of simple ideas with one another appears as close and permanent in the former case, but not in the latter.⁸³³

The critique of the concept of substance goes hand in hand in Hume, just as in Berkeley, with the critique of abstract ideas. Hume praises Berkeley's solution to this question, since the latter showed that all abstract ideas are in reality particular and concrete ideas that are linked with a term or concept in such a way that they receive an extended meaning; for Hume, one of the most important philosophical discoveries of recent times consists in this insight. He adduces additional arguments for it on his part, which can be summarized as follows. Against abstract ideas, which allegedly contain no reference to certain quality or quantity, he asserts first of all the inability of the intellect to speak of quality or quantity in general (as well as of things with general qualitative or quantitative determinations) without having formed a concrete idea of the respective character of the quality or the magnitude of the quantity. Since there are only individual things, the formation of an idea of an object must run parallel to the formation of a simple, i.e., sensory idea. General and abstract ideas represent basically imperfect and approximate summaries of various qualitative and quantitative elements that are given a common name. According to this pragmatic interpretation, general ideas serve as conventional means to satisfy the needs of communication between people. But even when we make use of such ideas, we think immediately and always of individual concrete things, which, moreover, we never survey in their totality before proceeding to the formation of general ideas. In this way arises the paradox of ideas that are particular and concrete by their constitution, but general by their content. A particular and concrete idea becomes general when it is linked with a general term that habitually refers to several similar ideas and automatically calls them to mind.⁸³⁴

⁸³³ *A Treatise on Human Nature*, I, 1, 6.

⁸³⁴ *Op. cit.*, I, 1, 7.

The transfer of this critique of the concept of substance to the field of psychology brings with it not only the abolition of the theological view of the unitary and immortal soul, but also of the belief in a personal identity of the human subject that exists independently of the fluctuations of cognitive contents and experiences. The fact that Hume establishes a connection between these two questions (the chapter dealing with identity follows the discussion of the question of immortality) possesses a highly symbolic significance; it indicates, namely, that certain central concepts of modern secular epistemology constituted disguises of basic motifs of traditional theological-spiritualistic metaphysics,⁸³⁵ so that the elimination of the latter sooner or later had to bring about the demise of the former. This double process takes its common beginning, of course, in the dissolution of substance. To pose the question of the soul correctly, Hume thinks, one must first clarify the question of substance and the mode of existence of attributes in it. He reverses Berkeley's position and considers the assumption of spiritual substances to be even more problematic than that of material ones. If ideas stem from sensible impressions, then the question must be posed, which impression could suggest the idea of a substance, specifically a spiritual one. On the other hand, it is not possible to define substance as something independent, i.e., something existing through and for itself. For everything that exists is *ipso facto* independent, and therefore independence cannot provide the criterion for the distinction between substance and its accidents. All our perceptions differ from one another, and they also exist independently of one another, without needing anything else as a basis or support of their existence. Inherence in a substance thus forms no necessary condition for the existence of perceptions. It is not true that everything existing exists only in a certain place. One would try in vain, therefore, to localize perceptions such as a smell or a color in a certain point of an extended object. If we nevertheless do not renounce such attempts, the reason lies in our logically illegitimate inclination to supplement our idea of the causal and temporal connection of our perceptions, which relate to a certain object, with the idea of a spatial connection. To entangle the theological view on spiritual substance in internal contradictions, Hume additionally uses the somewhat pharisaical argument that, if the traditional interpretation of the relations between substance and its attributes were actually correct, one would then have to agree with the atheist Spinoza (who according to Hume adopted that interpretation).⁸³⁶

For Hume it is beyond any doubt that the theory of the identity of the person can rest only on the assumption of a spiritual substance; an identity of another kind seems to him simply unthinkable and therefore he does not enter into the discussion of such possibilities or alternatives. He merely asks himself how our idea of an I as a unitary and solid entity arises. This deception is said to come about through the usual confusion of two ideas which are in themselves perfectly clear and independent of one another: it concerns the ideas of identity and

⁸³⁵ See on this the remarks in the Introduction to this work.

⁸³⁶ *Treatise*, I, 4, 5.

difference. Their confusion with one another springs from the fact that the imagination always works in the same way, regardless of whether it relates to a single object or to several that stand in relation to one another and follow one another in thought. To cover up this illogical confusion of two such different ideas, the soul, the I, and the substance are invented. The unity thus established remains nevertheless fictitious and incapable of truly unifying such heterogeneous quantities. It is two different things whether there is something that connects our various perceptions with one another, or whether something effects a connection of the ideas of our perceptions in our imagination. The identity belongs actually not to our perceptions, but it constitutes only a property that we attribute to them because of the connection of their ideas in our imagination—and the reason for this is that thought cannot establish real causal relationships between things anyway. The problem of identity is therefore rather grammatical than philosophical. Identity depends on the relations between ideas; these relations produce identity by effecting an imperceptible transition from one idea to another. The I can thus be compared to a theater stage on which ideas, just like actors, follow one another and replace one another. To underline the radicality of his negation of personal identity as substance, Hume adds that this comparison of consciousness with a stage must not mislead us. For in reality, the successive perceptions—and only these—constitute the mind; we have not the slightest notion of where the scenes of the play being performed take place or of what materials the stage consists.⁸³⁷

Thus we find ourselves at the end of a long path: both the scholastic-Aristotelian hierarchy of (intelligible) substances and the multitude of separated (material) substances is now replaced by a fragmented and fluctuating world of simple sensible elements that circulate freely and are combined with one another according to the habits of the cognitive subject (which for its part, just like the world reflected by it, is unitary only occasionally and only in loose connection). This is the final consequence of the revolution that began with the replacement of the primacy of substance by the primacy of function. This last consequence was not generally perceived in the Age of Enlightenment—and even less was it approved. This must be traced back primarily to the orientation of natural science in the 18th century, which unlike the natural science of the 20th (in its connection with the epistemological rediscovery of Berkeley and Hume) presupposes without further ado the existence of a solid underlying matter. The Enlightenment could not dissolve material substance without endangering the ontological revaluation of matter, which it had to advocate against theological spiritualism. What interested the Enlightenment primarily was the elimination of second substances and *formae substantiales* or the consideration of material bodies and their properties based on these concepts. As a characteristic representative of Enlightenment science, Buffon, wrote, experience has now

⁸³⁷ *Op. cit.*, I, 4, 6.

overthrown the abstract philosophical systems of the past and taught what natural properties are in reality.⁸³⁸ On the other hand, the struggle of the enlighteners against the metaphysically burdened concept of substance made necessary both the use of agnostic arguments and the emphasis on the view that attributes or accidents would constitute an independently organized whole. It concerns here a vacillating attitude, regardless of whether it appears as a mere continuation of Locke or as a continuation of Locke with an opening to Hume's position.

This wavering encounters us in the article on Substance in the "Encyclopedia". Substance is defined here as the sum of several properties, some of which always coexist, while others can disappear and be replaced by others. If we view the matter thus, the author thinks, there is nothing simpler than substance. Actually, we may attribute the name of substance only to the sum of primary and inseparable properties.⁸³⁹ The division of properties into more or less primary ones, however, rests for its part on the fact of interdependence or the relations of substances to one another; the distinction undertaken by the scholastics between substance and its attributes is a figment of the imagination.⁸⁴⁰ Although we do not always know the bond between properties, from which we have constructed the above-mentioned sum, this nevertheless does not constitute an arbitrary formation, since the properties to which we have given a common name are indeed closely connected with one another. It seems therefore as if the knowledge of properties *eo ipso* means the knowledge of the substance itself. With regard to the soul we can say, for example, that we know its substance when we have learned its functions exactly; the search for mysteries in it is superfluous.⁸⁴¹ And as for the body—how could we ever convince ourselves that it is something other than its properties, and how could we know it otherwise than through the knowledge of its attributes? Significantly, this treatment of the substance problem leads here, unlike in Hume, to a Spinozistic definition of God as a sum of perfections. Despite these radical hints, the author nevertheless keeps open the way out of agnosticism and decides finally for Locke's solution, i.e., for the separation between real and nominal substances.⁸⁴²

Finally, we must remark that the close connection between the doctrine of substance and that of definition in Aristotle was bound to effect the transformation of the latter after the fall of the former. In the article of the same name in the "Encyclopedia", definition is viewed as a (the precisely accurate) sum of properties, i.e., as enumeration of the fundamental simple ideas of which a complex idea is composed. Scholastic definitions of substances are considered empty and superficial. Instead of playing with genus and specific difference, one should rather analyze

⁸³⁸ Preface to the French translation of Hale's work *Vegetable Statics*, *Oeuvres*, 8 B.

⁸³⁹ *Encyclopédie*, XV, 583 B (Substance).

⁸⁴⁰ *Op. cit.*, 584 A.

⁸⁴¹ *Op. cit.*, 584 B.

⁸⁴² *Op. cit.*, 585 A.

precisely the simple ideas contained therein, i.e., one should explain the formation of our abstract ideas genetically and trace them back to the corresponding simple ideas.⁸⁴³ Words and abstractions must not be hypostatized; the best definitions are gained analytically, while the scholastics proceed synthetically-deductively and start from general and abstract ideas. The Aristotelian definition by means of genus and specific difference contains unwittingly and unintentionally a summarizing enumeration of properties, and its use is useful only to the extent that one becomes aware of this.⁸⁴⁴

⁸⁴³ *Encyclopédie*, IV, 746 AB.

⁸⁴⁴ *Op. cit.*, 747 A–748 A.

3. The Epistemological and Theory-of-Knowledge Definition of Metaphysics

The reinterpretation of the term "metaphysics" constitutes a polemical act aimed at withdrawing from the representatives of the traditional-theological worldview and philosophy one of their central concepts—and that means: one of their most important weapons. By giving the old term a radically new sense and utilizing the preparatory work of the 17th century known to us, the enlighteners want to prove that the "truly" highest and ultimate concepts, which by definition make up the object of metaphysics, are not those of the opponent, but their own. In other words: the enlighteners accept the conventional evaluation of metaphysics as the crown of knowledge and the sciences, but at the same time they turn this evaluation against the representatives of the traditional contents and positions of metaphysics. The fact that metaphysics, viewed as highest and ultimate (possible) knowledge, acquires a radically new sense and content, reflects the reordering of worldview, ontological, and cognitive priorities. We already know wherein the center of gravity of this reordering lay: the primacy of anthropology replaced the primacy of theology, and consequently the epistemological question overshadowed the ontological or metaphysical one, since being now appeared as a function of human cognitive faculty or of human cognition in its biological and social determinations. From a science of the principles of being (specifically immaterial being), metaphysics now transforms into a science of (the principles of) cognition (specifically the cognition of the material world). Metaphysics thus becomes epistemology or theory of knowledge.

The new meaning of the term "metaphysics" gained considerable ground in the 18th century, without the old one thereby falling into oblivion. The former flourished in Enlightenment circles, the latter remained alive not only among adherents and continuators of scholastic Aristotelianism, but also among theologians or pious thinkers who had detached themselves from scholasticism, but at the same time had to register with reluctance the ultimate anti-theological or anti-religious consequences of the Enlightenment revaluation of nature and sensibility. Precisely because the great danger was seen in the ontological revaluation of matter and the sensible in general, the reaction against the new tendencies manifested itself as an attempt to shield the Immaterial or Spiritual by preserving it as the exclusive or primary object of metaphysics. The more the worldview fronts clear and their struggle against each other becomes sharper, the more metaphysics and (theological) spiritualism approach each other to defend themselves jointly. For a consistent advocate of immaterial substances like Berkeley, metaphysics is synonymous with both first philosophy and theology, and it has as its object precisely these immaterial substances, which are considered principles and efficient causes of material ones. Metaphysics thus differs clearly from physics, which deals with mere empirical phenomena, but also from mathematics, which finds its application in the abstract mechanistic interpretation of the mentioned phenomena. The limits of the competence of physics are here

fixed once and for all and insurmountable, whereby the dependence of physics on metaphysics, which amounts to the ontological dependence of the material on the immaterial, is emphatically stressed.⁸⁴⁵ In its capacity as first philosophy, metaphysics simultaneously fulfills epistemological tasks, i.e., it dictates its principles to logic and mathematics.⁸⁴⁶ Through its definitionally spiritualistic attitude, it furthermore excludes *a limine* those questions in which materialistic tendencies seek their arguments, such as the questions of the interaction of mind and matter, of the capacity of the latter to think, etc.⁸⁴⁷ A later fierce opponent of materialism and skepticism like Reid conceives the object and function of metaphysics similarly. For him, metaphysics stands fundamentally apart from both mathematics and physics; it is namely identical with (natural) theology and investigates the supernatural causes of nature, thus God and final causes.⁸⁴⁸ Against Hume, Reid represents the existence of absolutely certain logical, mathematical, moral, and metaphysical principles. The latter are three: the existence of material and spiritual substances, causality, and the divine intellect as cause of material beings.⁸⁴⁹ The primary task of metaphysics remains here too the demonstration of the ontological dependence of the sensible on the intelligible, of the world on God.

The reminder of this use of the concept of metaphysics in the 18th century was necessary because the Enlightenment opponents of metaphysics for their part tended increasingly to identify it with theological spiritualism. On the other hand, the enlighteners trace the new, i.e., epistemologically and epistemologically oriented metaphysics back to Locke, who is often celebrated as a "great metaphysician".⁸⁵⁰ Locke himself, of course, knew the concept of metaphysics only in its traditional meaning, and he associated it with scholastics and theologians who, as he writes, used meaningless concepts and general, vague, or banal propositions.⁸⁵¹ Although the new meaning of the concept of metaphysics did not appear in Locke, nevertheless the contents connected with it condensed here in a way that was felt by the philosophical public opinion of the Enlightenment to be groundbreaking and binding. Locke had indeed declared in full tones that the work of philosophy consisted not in the (anyway impossible) knowledge of spiritual and material substances, but in the genetic analysis of the mechanisms and functions of our thought or cognitive faculty. Furthermore, Locke planned in fact to put in the place of the old metaphysics a novel logic and critique, which he wanted to call Semiotics.⁸⁵² In this plan lives on Hobbes's thought of a radically renewed first philosophy.

⁸⁴⁵ *De Motu*, §§ 34, 41, 71 = *Works*, IV, 40, 42, 51.

⁸⁴⁶ *The Analyst*, § 50, Qu. 49, 51 = *Works*, IV, 101.

⁸⁴⁷ *Dialogues*, III = *Works*, II, 258; cf. *Siris*, § 285 = *Works*, V, 13.

⁸⁴⁸ *Letter to Lord Kames* (Dec. 16, 1780), §§ 11–12 = *Works*, 58.

⁸⁴⁹ *Essays on the Intellectual Powers*, VI, 6 = *Works*, 452 ff.

⁸⁵⁰ See e.g. *Encyclopédie*, XV, 584 B (Substance).

⁸⁵¹ See e.g. *Essay*, III, 10, 2 and IV, 8, 9.

⁸⁵² *Op. cit.*, IV, 21, 4.

Hobbes, however, was interested in the clear definition of general epistemological concepts, while Locke wants to determine the sense of signs and simultaneously the relationship between signs and sensible ideas. Hobbes contented himself with the establishment of the origin of ideas from experience and did not concern himself further with this relationship, but Locke concentrates his attention primarily on the fact of the heterogeneity between idea and external source of the same. But if idea and thing are qualitatively heterogeneous quantities, then their relationship to each other does not differ from that between idea and word; it concerns namely a semiotic relationship. Since things do not appear as such in the mind, they must be represented by something, and this something is precisely the signs. The sign connects thing and idea with one another, and the idea is a sign of the thing just as the word forms a sign of the idea.⁸⁵³ The growing interest in the problem of ideas and signs with the intention of designing a semiotics went hand in hand, of course, with the conviction of the unknowability of substances and with the resulting indifference toward traditional metaphysics.

This shift of philosophical interests crystallizes symbolically among Locke's epigones in the new use of the term "metaphysics," which is even directly and consciously contrasted with its conventional use. As Condillac writes, there are two quite different kinds of metaphysics: one is ambitious, it wants to solve all world riddles and explain the essence of things; the other, initiated by Locke, is modest, it directs its research according to the capacity of the human mind, it moves thus within its given limits, and while it does not promise everything, it keeps its promises and grants certain knowledge. Philosophers like Descartes, Malebranche, or Leibniz, who proceed differently than Locke, know little about the functioning of our mind, which they try to explain by appealing to imaginary causes. They therefore fall victim to their own theories and, although in reality they can only look around themselves, nevertheless think they overlook the whole—like children who imagine they can touch the sky when they climb a peak. Condillac knows that metaphysics in the new sense rests on the primacy of function over substance; we cannot know the essence of the soul, but only its functions.⁸⁵⁴ The other fundamental prerequisite of the new metaphysics, i.e., the primacy of anthropology, is clearly expressed by Hume. The science of man, he thinks, forms the only solid foundation of all other sciences, including mathematics and physics; human nature, hitherto neglected, should be our exclusive object of knowledge.⁸⁵⁵ Hume connects his conviction that the only way to the emancipation and development of knowledge is the investigation of human cognitive faculty with the observation of the necessity to cultivate "true metaphysics" conscientiously and to

⁸⁵³ Armstrong, *Metaphysics*, 111 ff.

⁸⁵⁴ *Essai sur l'origine des connaissances humaines*, Introduction = *Oeuvres*, I, 3 A–4 A.

⁸⁵⁵ *Treatise*, Introduction and I, 4, 7.

destroy the false or spurious one.⁸⁵⁶ This latter is for Hume no science,⁸⁵⁷ but coincides with scholastic theology, which knows nothing of mathematics and experience; such products of thought should rather be committed to the flames, since they contain only sophistry and illusion.⁸⁵⁸

The new use of the term "metaphysics" quickly became part of the philosophical language of the Enlightenment. When Maupertuis, for example, speaks of "metaphysical experiments," he means experiments on the behavior of mental functions in different situations; "metaphysical knowledge" he calls in turn that which relates to the fundamental concepts of the human mind.⁸⁵⁹ Maupertuis attributes the authorship of this hierarchization of philosophical interests to Locke, who, as he writes, closely connected logic and the science of the human mind and then traced them both back to a kind of grammar that would be capable of serving as an introductory discipline for all sciences and solving most major questions.⁸⁶⁰ This could be an allusion to Locke's (unwritten) semiotics. In any case, these words express the strong interest of a scientist or researcher in a general epistemology which, despite closest connection with epistemological questions, would not merge into them. While metaphysics as epistemology could be traced back to Locke without difficulty, metaphysics as general epistemology originated, as we know, from Bacon. At least those familiar with Bacon, like d'Alembert, knew of it. Bacon's classifications and distinctions live on in d'Alembert's view that physics is divided into special and general, and that one can speak of metaphysics only in connection with the latter, but not with the former, whose sphere of activity is immediate limited experience; metaphysics is here the summary of the general principles of physics.⁸⁶¹ However, d'Alembert also contrasts traditional metaphysics with metaphysics in the sense of a general epistemology that could be applied in the natural as well as the mathematical sciences. Depending on the sense attributed to it in each case, he writes, metaphysics can be the most fruitful or the most sterile form of knowledge. The former case occurs when it limits itself to the knowable and proceeds inductively, the latter when it becomes arrogant and obscure, attempting to penetrate into inaccessible areas and talking about the attributes of God, the nature of the soul, freedom, etc. Of interest can only be a terrestrial metaphysics that finds application in physics and mathematics; for there is no science without its metaphysics—if we understand by this the general principles on which a science rests, principles that contain all truths of the respective science in germ, from which we must start for the discovery of new truths or to which we must fall back to test new insights.⁸⁶²

⁸⁵⁶ *An Enquiry concerning Human Understanding*, Sect. 1 = p. 12.

⁸⁵⁷ *Op. cit.*, 12.

⁸⁵⁸ *Op. cit.*, XII = p. 165.

⁸⁵⁹ *Lettre sur le progrès des Sciences*, § XVII = *Oeuvres*, II, 426 ff., 430.

⁸⁶⁰ *Harangue dans l'Académie Française le jour de sa réception* = *Oeuvres*, III, 264.

⁸⁶¹ *Elémens de la Philosophie*, Eclairc. XV = *Oeuvres*, II, 357–359.

⁸⁶² *Op. cit.*, 356 f.

D'Alembert also uses the term "metaphysics" in its epistemological meaning, thinking of Locke (and the further development of Locke's thoughts by Condillac). Also in this meaning, the new metaphysics is contrasted with the obscurity and sterility of the old. As d'Alembert thinks, every science that does not want to be chimerical must start from simple established facts—physics from everyday experience, geometry from the perceptible properties of extension, morals from feelings or passions common to all men, and metaphysics from sensory data.⁸⁶³ It is empirically established that we recognize things through ideas and that ideas are rooted in the senses. The question now arises how ideas originate from the senses. Metaphysics deals mainly with this origin, and it would do well to limit itself to this problem, since the other questions it has traditionally engaged in are partly insoluble and partly empty. If metaphysics remained within its limits, it would spare itself the contempt to which it is meanwhile exposed, and it would even be accessible to all, since it would consist of few simple truths.⁸⁶⁴ These truths intertwine for their part with the highest axioms of the most important disciplines, and therefore the ideal of a universal and definitive knowledge appears realizable. D'Alembert considers the coupling of metaphysics with the two other sciences that are extremely important to man, i.e., ethics and logic, to be desirable, indeed inevitable. Since metaphysics investigates the origin of ideas from sense impressions, it must, if it wants to be complete, explain how it happens that these impressions evoke in us ideas that *prima vista* have nothing to do with the senses; such ideas are e.g. those of right and wrong. In this way, a connection of the fundamental truths of metaphysics with the basic concepts of ethics would be established. For its part, logic is the art of comparing ideas with one another. But to learn how one can compare ideas with one another, one must first learn how ideas arise, and the investigation of this origin presupposes in turn the use of logical rules: the interweaving of metaphysics and logic proves thus to be indispensable.⁸⁶⁵

In the extensive programmatic introduction to the "Encyclopedia," d'Alembert uses the new concept of metaphysics in both its meanings, i.e., the epistemological and the epistemological, without distinguishing between the two. In epistemological terms, metaphysics forms the basis of all our knowledge and contains clear and distinct general concepts. Regarding method, this metaphysics hardly differs from experimental physics, i.e., it too collects facts which it unifies and thereby explains by highlighting the most important ones that underlie the others; in this way metaphysics gains its principles or axioms. If now d'Alembert does not distinguish the epistemological meaning of the new metaphysics from the epistemological one, the reason for this is obviously that he makes no methodical difference between the two. Locke, he thinks, had constructed his "metaphysics" roughly as Newton his physics: by eliminating abstractions, that

⁸⁶³ *Op. cit.*, IV; cf. *Eclairc.* I = *Oeuvres*, II, 30 f., 39 f.

⁸⁶⁴ *Op. cit.*, VI = *Oeuvres*, II, 124 f.

⁸⁶⁵ *Op. cit.*, XIII = *Oeuvres*, II, 240 f.

source of all errors, and concentrating his study on the functions of the soul, he made of metaphysics exactly what it should be, i.e., the experimental physics of the soul.⁸⁶⁶ The juxtaposition of scholastic-Aristotelian metaphysics to Locke's "metaphysical experiments" constitutes, of course, a commonplace in the "Encyclopedia." As one reads here, those experiments show how abstractions arise, and thereby they prevent a hypostatization of the same. Ideas stem, in other words, from the senses, and abstractions represent basically aids for classifying our ideas into certain categories based on established similarities and differences; whoever does not keep this in mind forgets that abstractions are creatures of our thought and transforms them into independent beings.⁸⁶⁷ That is: empiricist genetic epistemology constitutes an automatic justification of both inductive procedure and nominalist attitude; the new, epistemologically oriented metaphysics thus appears *eo ipso* as the embodied opposite of the old, which hypostatized abstractions and preferred to use deduction.

The epistemological significance of the new "Metaphysics" is highlighted no less in the articles of the "Encyclopedia," and the reason for this lies in the wish of the enlighteners to prove that the elimination of the old metaphysics will by no means entail the end of systematic knowledge. Just as the sensible world is now considered—against the basic assumption of traditional metaphysics—as a rationally structured object of knowledge, so too the science of this world is held capable of achieving, indeed surpassing, the unity, universality, and certainty of the old science of being. As an ensemble of few highest principles, the new epistemology creates the impression of uniform and universally valid knowledge. An essential feature of it lies moreover in the close connection of these its principles with experience on the one hand and technical practice on the other. As the author of an article emphasizes, that metaphysics which guides or should guide inventors is nothing other than the clear and precise exposition of the general philosophical truths on which the principles of the (respective) science are based; the simpler and easier to grasp this metaphysics is, the more valuable it proves to be. The author knows that he is using an old term in a new sense, and therefore he explains subsequently that metaphysics in the narrow sense is the science of purely spiritual entities, but in the newer and broader sense that universal science which contains the principles of all other sciences within itself; and if every science that wants to have solid foundations has to start from experience, then its metaphysics must also include the general theoretical results of empirical observation.⁸⁶⁸ Even stronger is the connection of metaphysics (as theoretical generalization of empirical data) and practice emphasized in the article "Metaphysics." Metaphysics, it says here, is the science of the reasons (*raisons*) of things. Everything has its metaphysics and its practice; a practice without knowledge of its own reasons or a knowledge of the same without practical application could

⁸⁶⁶ *Discours Préliminaire* = *Encyclopédie*, I, xxvii–xxviii.

⁸⁶⁷ *Encyclopédie*, XVII, 182 B–183 A (Vérité [métaphysique]).

⁸⁶⁸ *Op. cit.*, V, 492 B (Eléments).

only result in an imperfect science. An artist or a scientist who truly understands the reasons of his own activity can also formulate its metaphysics, i.e., its inner laws. This metaphysics represents, however, something completely different from the empty and abstract thoughts that were formerly covered with this name.⁸⁶⁹

The epistemological and epistemological meaning of the term "metaphysics" remained alive into the final phase of the Enlightenment movement of the 18th century. Cabanis, that characteristic representative of the "Ideologues," explained it again in detail. What is called "metaphysics" today, he wrote, has nothing to do with the old—neither regarding its tools of thought nor regarding their use. Abstractions are no longer considered real beings, and no one concerns himself with the definition of empty words. According to Locke, Condillac, and Helvétius, metaphysics consists in the knowledge of the functions of the human mind and parallel to that in the establishment of the rules that must be followed to find out the truth—regardless of whether our research concerns man or the extra-human world. This metaphysics can be applied to the natural and ethical sciences as well as to the arts; it guides the legislator, the experimenter, and the craftsman equally. In short: true metaphysics is the science of methods—methods that it bases on the knowledge of the mental faculties and functions of man and which it also specifies according to the constitution of its respective objects and fields of application.⁸⁷⁰ Here it is indicated where the link between the epistemological and the epistemological meaning of the new metaphysics is to be sought: only the knowledge of the functions of the human mind enables the finding out of the correct method, especially since, as already noted, empiricist epistemology *eo ipso* seems to justify the inductive procedure.

In Germany, where late scholasticism thanks to its Protestant revision had enjoyed a special vitality and longevity, the new meaning of metaphysics broke ground through the gradual transformation of ontology (i.e., *metaphysica generalis*) into logic and epistemology known to us.⁸⁷¹ This transformation intensified among Wolff's immediate successors, such as Baumgarten, whose metaphysics handbook Kant based his lectures on. Like Wolff, Baumgarten also makes no explicit distinction between *metaphysica generalis* and *specialis*; thus ontology appears as the first part of a unified metaphysics (the other three are cosmology, psychology, and natural theology), although the term "ontology" is used synonymously with "*prima philosophia*" and "*metaphysica universalis*".⁸⁷² In this its generality, metaphysics is now defined as the science of the first principles of human knowledge. These principles comprise the most general and abstract concepts, which do not stem from the senses, but are either extra-sensible (and then they relate

⁸⁶⁹ *Op. cit.*, X, 440; cf. Keyword: Encyclopédie.

⁸⁷⁰ *Lettre sur un passage de la 'Décade Philosophique' et en général sur la perfectibilité de l'esprit humain, Oeuvres*, II, 514 f.

⁸⁷¹ See above Chap. II, Sect. 6.

⁸⁷² *Metaphysik*, § 1.

to simple or immaterial substances) or supra-sensible (and then they relate to simple as well as complex substances). Supra-sensible concepts form precisely the object of ontology and, since they relate to very different substances, they express the most general and abstract attributes of all things.⁸⁷³ As the science of general attributes, ontology transforms into logic or rather into (intellectualist) epistemology. Characteristic of this turn is the fact that Baumgarten was the first to coin the term "*gnoseologia*," regarding logic as the higher and aesthetics (= study of the mechanisms of sensory knowledge) as the lower part of this doctrine of knowledge.⁸⁷⁴ No less significant is the way Baumgarten justifies the inclusion of psychology in metaphysics: psychology contains the first principles of theology, aesthetics, logic, and the practical sciences.⁸⁷⁵

The connection of this shift or reinterpretation of traditional concepts with specifically Enlightenment questions is shown already by the fact that the "critical" Kant considers ontology and transcendental philosophy as synonymous. As ontology in the Kantian sense, transcendental philosophy investigates exclusively the understanding and reason, as they function in a system of concepts and principles that relate to objects in general, i.e., without regard to their empirical existence and constitution.⁸⁷⁶ Elsewhere Kant defines transcendental philosophy as the study of the knowing subject,⁸⁷⁷ while he says of ontology in a similar sense that it is the science of the a priori knowledge of things.⁸⁷⁸ Like Wolff and Baumgarten, Kant also does not distinguish between *metaphysica generalis* (ontology) and *metaphysica specialis*, but he conceives of ontology as the first part of a four-part but systematically unified metaphysics.⁸⁷⁹ This is at least one reason why the position of transcendental philosophy (ontology) within the system of Kantian metaphysics appears somewhat unclear. For if transcendental philosophy forms the first part of Kantian metaphysics, it is on the other hand this same transcendental philosophy that makes the determination of the possibility of a metaphysics at all, and in this sense it precedes the latter, i.e., it stands outside its jurisdiction and represents an independent critical-philosophical authority.⁸⁸⁰ The critical function of transcendental philosophy makes it something other than Baumgarten's ontology, regardless of the logical and intellectual-historical relationships between these two concepts. We must now explain what modern-Enlightenment aspects characterize Kant's view.

⁸⁷³ *Op. cit.*, § 4.

⁸⁷⁴ *Op. cit.*, §§ 395, 533, 624.

⁸⁷⁵ *Op. cit.*, § 368.

⁸⁷⁶ B, 873; cf. B, 303.

⁸⁷⁷ *Refl.* 4455.

⁸⁷⁸ *Refl.* 5936; cf. 5181.

⁸⁷⁹ B, 874.

⁸⁸⁰ *Prolegomena*, § 5 = AA, IV, 279. Cf. Ando, *Metaphysics*, 53 f., who shows the influence of Baumgarten's ontology on the Kantian view.

The Wolffian prehistory of "critical" transcendental philosophy is reflected, of course, in the a priori-intellectualist character of this latter, but on the other hand, the insight into the necessity of the transformation of metaphysics into epistemology goes back to a phase of Kant's "pre-critical" development in which the influence of Western European currents on his thought reached a peak. During this phase, Kant came to the conclusion that metaphysics deals not with objects, but with cognitions,⁸⁸¹ and appealed to Baumgarten's definition of metaphysics mentioned above to underpin this conviction.⁸⁸² This Kantian use of the mentioned definition confirms our observations about the development of (post-)Wolffian ontology in an epistemological direction. Kant resorts to this use, however, against the background of his comprehensive critique of (Wolffian) intellectualism, which concretizes itself in a juxtaposition of philosophical and mathematical method. Against Wolff's identification of the two, Kant argues that while mathematics rests on a few axioms from which the rest can be deduced, the basic truths in metaphysics form the object of infinite research.⁸⁸³ Mathematics is, in short, a synthetic science, metaphysics an analytic one;⁸⁸⁴ it must therefore not start from definitions, but must find in an object what is certain, and base its further work on this solid foundation. As Kant writes, linking up with a commonplace of the Western European Enlightenment, true metaphysical method is that which Newton introduced into physics, i.e., finding out the rules according to which natural phenomena behave, through "certain experiences" and with the help of geometry.⁸⁸⁵ Also under the influence of Western European empiricism, Kant explains three years later that all our judgments rest on empirical concepts, in order to subsequently define metaphysics as the science of the limits of human reason. The connection between empiricist attitude and new concept of metaphysics is the same here as in the Western European Enlightenment; Kant justifies the restriction of metaphysical questions to the human horizon of knowledge with the stereotypical arguments of Western European empiricists: we should rather concern ourselves with what is certain and does not exceed our limited cognitive faculty.⁸⁸⁶

Compared to this statement, the views of the "critical" Kant change substantially. While the fundamental agreement with Western European empiricism regarding the limits of human knowledge remains, Kant now declares, resuming his intellectualist-Wolffian philosophical schooling (the synonymy of transcendental philosophy and ontology emerges, as noted, precisely in his "critical" phase), the possibility of a metaphysics that is indeed epistemologically oriented, but nevertheless a priori. Metaphysics is accordingly defined as the science of the first

⁸⁸¹ *Refl.* 4853; cf. 4457, 3952, 3946.

⁸⁸² *Untersuchung über die Deutlichkeit etc.*, II = AA, II, 283.

⁸⁸³ *Op. cit.*, 281.

⁸⁸⁴ *Nachricht von der Einrichtung seiner Vorlesungen etc.* = AA, II, 308.

⁸⁸⁵ *Untersuchung...*, II = AA, II, 285 f.

⁸⁸⁶ *Träume eines Geistersehers*, II, 2 = AA, II, 367 f.

principles that pure intellect uses; it contains no empirical principle, but its principles must be sought in the constitution of the pure intellect itself.⁸⁸⁷ Unlike the time when the method of metaphysics was compared with Newton's, Kant now sees a basic rule of metaphysical method in that the principles of empirical knowledge must in no way exceed their limits and must not mix with intelligible knowledge.⁸⁸⁸ Kant further divides the philosophy of pure reason into two parts: into the propaedeutic or critical, which deals with the faculty of reason with regard to a priori knowledge, and into metaphysics, which constitutes the whole system of pure reason, i.e., the systematically ordered whole of philosophical knowledge as it results from the activity of pure reason. But he adds immediately that the name "metaphysics" could also be given to the entire philosophy of pure reason including its propaedeutic or critical part.⁸⁸⁹ This ambivalent definition of metaphysics stands, of course, in direct relation to the ambiguity noted above regarding the systematic position of transcendental philosophy. Be that as it may—it is to be proven here that metaphysics, independent of its systematic status and scope, proceeds a priori. regarding its object, it branches into two parts corresponding to the double, i.e., theoretical and practical use of pure reason. Thus we have the metaphysics of nature and the metaphysics of morals, whereby Kant, who wants to emphasize the novelty of his practical foundation of metaphysics, feels obliged to explain that only the theoretical use of pure reason creates metaphysics in the narrower (read: traditional) sense of the word.⁸⁹⁰ Epistemological character Kant's metaphysics has insofar as its "highest maxims" ground the possibility of some sciences and the use of all.⁸⁹¹

Although the metaphysics of the "critical" Kant differs from the corresponding metaphysics of the empiristically attuned enlighteners due to its a priori character, the epistemological and epistemological orientation as well as the task setting remain common (we already mentioned that d'Alembert, e.g., also knew how to connect metaphysics in the new sense with the questions of both physics and ethics). Kant sets an additional goal above his metaphysics or the epistemological and epistemological system of pure reason, through which a bridge is built between the old and the new sense of metaphysics or the old metaphysics is indirectly restored. In other words: the new metaphysics establishes the limits of human cognitive faculty based on the study of the same, and from this finding it then draws the conclusion that for the attainment of certain practical-normative purposes a recourse to the old metaphysics, i.e., to the ideas of God, immortality, and freedom, is indispensable.⁸⁹² This conclusion remains logically

⁸⁸⁷ *De mundi sensibilis atque intelligibilis forma et principiis*, § 8 = AA, II, 395.

⁸⁸⁸ *Op. cit.*, § 24 = AA, II, 411; cf. *Prolegomena*, §§ 1–2 = AA, IV, 265 ff.

⁸⁸⁹ B, 869; cf. A, xx.

⁸⁹⁰ B, 869 f.; cf. *Grundlegung zur Metaphysik der Sitten*, Preface = AA, IV, 387 f.

⁸⁹¹ B, 879; cf. *Ref.* 5681.

⁸⁹² B, 7 and 395, Note.

questionable, however. It would be valid if it could be shown flawlessly that no immanent foundation of morality is possible—regardless of whether on empiricist or intellectualist ways. Furthermore, the Kantian connection between the intellectualist character of the new metaphysics and the reintroduction of the old appears by no means logically compelling: for an empiricist can also regard the ideas of God or immortality as practical-moral postulates or as practical-morally expedient postulates.⁸⁹³ Both the new (Kantian) and the old metaphysics are based, of course, on the assumption of an Immaterial, but this latter has a different meaning in each case. In the first case, those "metaphysical" elements that transcend experience⁸⁹⁴ are epistemological or epistemological intelligible quantities, in the second case, however, they are substances whose assumption forces the assumption of a certain ontology. The logical compulsion to assume this spiritualistic ontology makes basically the Kantian assertion pointless that the immaterial God or the immaterial soul cannot be grasped by theoretical reason, but are postulates of the practical. But even if they are, they must have a very specific ontological constitution to fulfill their practical-moral function. These logical weaknesses become understandable when we consider that Kant's restoration of the old metaphysics sprang in reality not from practical-moral, as he himself wanted to believe, but rather from anthropological considerations.⁸⁹⁵

We will conclude this section with a reference to an intellectually very interesting point where the continuity of certain anti-metaphysical motifs from Humanism to the Enlightenment becomes noticeable. It concerns the connection of the principle *verum factum convertuntur* with the epistemological and epistemological definition of metaphysics. Such a connection is found, for example, in d'Alembert, when he writes that metaphysics, which has as its object the history or the origin and formation of our ideas, may hope for its own theoretical completion precisely because these ideas are our work and can therefore be completely known.⁸⁹⁶ Even more vividly, the mentioned connection appears in Vico, a thinker, that is, who by his origin and schooling stood closer to the ideas of Humanism (or their remnants) and linked humanist thought with Enlightenment positions on different levels of thought.⁸⁹⁷ Initially, Vico uses the term "metaphysics" in its traditional meaning and allows the principle *verum factum convertuntur* to

⁸⁹³ As Hume e.g. does, see *Treatise*, I, 4, 5 (Conclusion); cf. d'Alembert, *Elémens*, VI = *Oeuvres*, II, 150.

⁸⁹⁴ See e.g. *Prolegomena*, § 1 = AA, IV, 255.

⁸⁹⁵ See below Sect. 4 d in this chapter.

⁸⁹⁶ *Elémens*, Eclairc. I = *Oeuvres*, II, 41.

⁸⁹⁷ If Vico, e.g., in agreement with the prevailing tendency in the 18th century, fights against Cartesian mathematicism, he uses the argument that mathematics and mathematical method are useful only in certain areas of knowledge and therefore cannot claim universal validity (*Risposta etc.* = *Opere Filosofiche*, 165). The same argument appears often in (late) humanist literature, where it served to defend rhetoric against geometry and Aristotelian syllogistics (which was believed to be connected with it). See e.g. Ramus, *Aristotelicae Animadv.*, 55 v–56 r, as well as Nizolio, *De veris principiis*, III, 7 = II, 87 f.

apply only to mathematics (whose universal claim he nevertheless disputes) and partly also to experimental physics.⁸⁹⁸ The imposing discovery of the historical universe in Vico's late work, however, entails the reinterpretation of metaphysics and at the same time the shift of the scope of application of the principle *verum factum convertuntur*. If this principle is applied to the realm of history, it means that man as the author of the historical universe can adequately know the same—if only he creates the appropriate organ of knowledge.

Vico summarizes the central idea of his work to the effect that the historical world or, as he calls it, the world of nations was made by men and consequently its explanation requires the knowledge of the various modifications or transformations of the human mind.⁸⁹⁹ If history consists of constantly changing crystallizations of human mental powers and *verum* and *factum* transform into each other, then the ultimate (and only possible) knowledge, i.e., metaphysics, is precisely the knowledge of these mental powers. The "*metafisica della mente umana*" must therefore constitute the introduction to the new science, which is actually "*una storia dell' umane Idee*".⁹⁰⁰ In other places, the new science is called "metaphysical critique"⁹⁰¹ and the historical world, the world of the human mind, is designated as "metaphysical world".⁹⁰² In accordance with Vico's general view of the relationship between divine and human things,⁹⁰³ his "metaphysics" now aims to recognize the effect of divine providence within the development of social customs and institutions—in contrast to the older metaphysics, which, as Vico believes, sought the traces of God primarily in nature.⁹⁰⁴ From traditional metaphysics, Vico's differs also in that it strives for no direct rational knowledge of God, but only wants to trace his activity within the historical action of men. Since Vico's "metaphysics" treats not only the mechanisms of the human mind, but also their historical crystallizations and furthermore not only the cognitive faculty but also the passions etc. of man, it appears different and also more extensive than the merely epistemological and epistemological metaphysics of the enlighteners. In both cases, however, the primacy of anthropology remains guiding. Moreover, Vico allows the laws of the origin and development of the mind, as formulated by empiricist epistemology, to apply also in the realm of history. Metaphysics is the history of human ideas in the literal sense that it starts at the elementary historical stages of knowledge. Thus the very first metaphysics, the metaphysics of the poets, was not abstract and intellectual, but addressed the senses, which indeed form the starting point of knowledge.⁹⁰⁵ This view implies, of course, a structural

⁸⁹⁸ Morrison, *Vico's Principle*, esp. 531, 535, 537.

⁸⁹⁹ *Nuova Scienza* (Text of 1744) = *Opere Fil.*, 467.

⁹⁰⁰ *Op. cit.*, 466.

⁹⁰¹ *Op. cit.*, 467 f.

⁹⁰² *Op. cit.*, 379.

⁹⁰³ On this Kondylis, *Aufklärung*, 441 f. (with bibliography).

⁹⁰⁴ *Nuova Scienza* = *Opere Fil.*, 381, 379.

⁹⁰⁵ *Op. cit.*, 475 f.

correspondence between knowledge and its object—a correspondence which Vico famously assumes: this was also a consequence of the principle *verum factum convertuntur*.

4. The Basic Types of Metaphysics Critique

a) The Polemical Agnosticism of the Enlighteners and Empiricist Epistemology as Denial of the Metaphysical Claims of the Intellect

Agnosticism stands at the forefront of anti-metaphysical argumentation during the 18th century, just as it did in the four preceding ones, as articulated by the (great) majority of the Enlightenmenters. Its popularity lay in its suitability to fulfill two functions that were equally necessary in the worldview polemic. First, the declared goal of Enlightenment agnosticism was to eradicate from the intellectual realm all those questions that were regarded as central by traditional metaphysics, so that those topics could remain as the exclusive object of human mental activity whose prioritization amounted to a preliminary decision in favor of the anti-theological-secular worldview attitude. Here it was (tacitly) presupposed that thought, if it wanted to be considered serious and be serious, must not lose itself in the sterile questions of traditional metaphysics. As d'Alembert writes, philosophy should refrain from investigating questions whose object is perhaps a real one, but whose solution contributes hardly anything to the progress of our knowledge; precisely such questions have stood in the center of scholastic dispute in the past.⁹⁰⁶ The polemical character of this agnosticism is shown by the fact that human knowledge in general and as such is not held to be uncertain or impossible here, but only that which passed for the highest and most important knowledge to the opposing traditional metaphysics. Therefore, d'Argens wants to reassure those who might get the impression that the agnostic position would entail the denial of any certain knowledge. This position, he explains, applies to the useless (scholastic-Aristotelian) logic, to that physics which is not based on experiments, and finally to the dark and unfathomable depths of metaphysics.⁹⁰⁷ Certainty, on the contrary, we can gain in mathematics and experimental physics, where the experiment verifies or corrects theoretical hypotheses. Errors, however, are neither demonstrable nor momentous either in a physics that wants to know nothing of experiments or in metaphysics: here they find the best breeding ground and, since empirical proofs cannot be adduced in such questions, the semi-educated present their conjectures as genuine solutions and become increasingly incomprehensible in the process, by additionally obscuring the object of their theoretical preoccupation through ever new distinctions and subdivisions.⁹⁰⁸ From this, one can readily gather that the final detachment from metaphysical questioning is viewed as a prerequisite for any certain knowledge and any serious mental effort. Thus, in the 18th century, that tendency reaches its peak which began with the disparagement of the *certitudo obiecti*—i.e., the view that the noble object of traditional metaphysics *eo ipso* guarantees its certainty. As the

⁹⁰⁶ *Elémens*, IV = *Oeuvres*, II, 31.

⁹⁰⁷ *Philosophie du Bons-Sens*, Réfl. I = I, 43.

⁹⁰⁸ *Op. cit.*, Discours Préliminaire, § III = I, 68.

author of an article in the "Encyclopedia" states, the importance of the object of knowledge signifies no guarantee for the certainty of knowledge; only its evidence is capable of guaranteeing certainty.⁹⁰⁹

The second reason why agnostic arguments appeared very useful in the Age of Enlightenment lay in the fact that they could offer an alibi against the still socially powerful, terrifying Church. The elimination of traditional metaphysics, that is, the first goal of Enlightenment agnosticism, could also be reached by a more direct route, i.e., by its open rejection in the name of a new, secular metaphysics with universal claim. However, only the small minority of materialists could or wanted to take this path. The great majority of Enlighteners, who fight materialism more or less vigorously,⁹¹⁰ prefers to entrench itself behind the old and, as we know,⁹¹¹ proven alliance of agnosticism and fideism, which, however, was interpreted in such a way that its reverse side consisted in the separation of rational scientific research from revealed truths and thus in the autonomization of profane reason. In this way, both the desired freedom of movement and the often necessary preservation of appearances vis-à-vis theology could be achieved. Not infrequently, the Enlighteners go a step further and, by passing over to the counterattack themselves with the help of enemy weapons, they claim that only the elimination of metaphysics and the endless disputes connected with it would make belief in God simple, certain, and evident, since one could henceforth base it either on the results of modern natural science or on purely practical-moral postulates. In a time when God was not yet dead, he is thus harnessed for Enlightenment purposes—for purposes, that is, which ran counter to the declared goals and values of his traditional representatives.⁹¹² In the eyes of the young Deist Diderot, for example, metaphysics was not only incapable of combating atheism effectively, but it even encouraged it, since its sterile subtleties must drive people to skepticism; in contrast, experimental physics, by demonstrating the inner purposiveness of nature, effects a turning of the mind toward God.⁹¹³ Voltaire epigrammatically formulates the view of most Enlighteners who want to keep equal distance from (theological) metaphysics and atheism: bad metaphysics, in connection with superstition, serves only to put atheists into the world.⁹¹⁴ D'Alembert thinks the same, who is equally interested in replacing theological metaphysics with a deistic theology that would be based essentially on modern physics and the practical-moral postulates of the Enlightenment. The scholastics degrade the deity by each conducting proofs of God that are called into question by the others. The true philosopher, however, will seek the existence of God

⁹⁰⁹ *Encyclopédie*, II, 846 (Certitude).

⁹¹⁰ Kondylis, *Aufklärung*, esp. 528 ff.

⁹¹¹ See above I 3, II 2, III 4a.

⁹¹² Kondylis, *Aufklärung*, 361 ff.

⁹¹³ *Pensées Philosophiques*, XVIII–XX = *Oeuvres*, I, 132–135.

⁹¹⁴ Brief an Moulton of Aug. 2, 1763 = *Oeuvres*, XLII, 409.

in natural phenomena and in the admirable lawfulness that prevails in them, without letting himself be disturbed by exceptions or by the miracles of theological metaphysics; as far as the immortality of the soul is concerned, moral-philosophical arguments suffice for its demonstration.⁹¹⁵

No one in the Age of Enlightenment remembered the agnostic arguments of the Humanists of the 15th and 16th centuries, and no one used them. Some went back to Bacon or Montaigne, but most drew directly from Locke, who had summarized the central commonplaces of agnosticism in a usable and even popularized form. Not by chance did he do this right at the beginning of his main work, simultaneously emphasizing the primary importance of the question of the limits of knowledge. From the moment one is clear about these limits thanks to empiricist epistemology, it becomes evident how useless or even harmful it is to occupy oneself with problems that exceed our thinking capacities. The only result of such preoccupation is entanglement in endless disputes about objects over which no clarity can be gained anyway. In doing so, we neglect what is useful to us in life, and finally, we turn against our own human nature, which we vainly seek to overcome. What concerns us directly as human beings, we can also master by means of our available powers. Only if we renounce questions that are empty, at least for us, can we turn to vital topics and thereby free ourselves from the paralyzing skepticism to which we must succumb after repeated failures in attempts to solve metaphysical problems. Our task as human beings is not to know everything, but only that which has to do with our practical life.⁹¹⁶ This emphatic juxtaposition of the useful and the useless characterizes very many statements by Enlighteners about metaphysics. Thus Shaftesbury thinks metaphysics would be acceptable as a philosophical discipline if it had something useful to tell us. In reality, however, no connection can be established between the definition of material and immaterial substances or the distinction of their qualities and modes and the investigation of human behavior; metaphysical studies lead astray precisely because of their great pretensions.⁹¹⁷ What use to us are the subtle analyses of the problem of substance and what is the result of such syllogistic acumen if man remains just as enigmatic to himself as before?⁹¹⁸ There is only one single reason to familiarize ourselves with the metaphysical part of philosophy: to assure ourselves finally that we have nothing to learn here.⁹¹⁹

The dissemination of agnostic anti-metaphysical arguments in the 18th century went hand in hand with the dissemination of empiricist epistemology, which retained the upper hand in the Enlightenment camp in various variations and with relatively few exceptions. The inner logical

⁹¹⁵ *Elémens*, VI = *Oeuvres*, II, 148, 150; cf. above note 108.

⁹¹⁶ *Essay*, Introduction, §§ 4–6.

⁹¹⁷ *Characteristicks*, I, 289 f.

⁹¹⁸ *Op. cit.*, I, 290 f.

⁹¹⁹ *Op. cit.*, III, 210 f.

connection of agnosticism and empiricism, as it emerges in Locke's work, can be formulated as follows: if our knowledge is empirical, it must also be finite, i.e., dependent on the limited cognitive range of our sense organs. Thought can do nothing more than process sense data or combine them with one another (if we want to assume at all that it possesses independence and does not coincide with the mentioned functions); every attempt of thought to detach itself from sense data or even go beyond them must therefore produce improvisations and fictions that cannot hit the ontological essence of things: for we can only approximate this to the extent that the testimony of the senses and the conclusions drawn from them permit. The existence of a pure thought proceeding *a priori*, which seemed capable of grasping supersensible truths, is radically called into question after the rejection of innate ideas, and supersensible truths themselves are henceforth regarded as illusory. As Hume writes, who in this point represents the view of the great majority of Enlighteners, our thought moves within narrow limits despite the appearance of its furthest freedom, and its entire creative power consists in the ability to assemble or rearrange the materials offered by experience.⁹²⁰ There is no way beyond experience, and hypotheses about the ultimate properties of things are simply chimerical.⁹²¹ The insight into the empirical origin and constitution of human knowledge in general thus makes traditional metaphysics impossible *a limine*. The grasping of the truly existent becomes unattainable, unless one wishes to identify the truly existent with sense data. But then metaphysics as well as the expression "truly existent" itself would be superfluous.

Empirically minded Enlighteners saw an attempt at the resurrection of intellectualism and its soaring cognitive claims in the construction of metaphysical systems *more geometrico*. In these, metaphysical truths appeared as *a priori* given mathematical axioms, which sprang from or corresponded to the unalterable structure of an intellect that was capable of grasping the likewise unalterable essence of things once and for all. This interweaving of mathematical and metaphysical intellectualism is opposed by the thought combination of empiricism and agnosticism described above. As the author of an article in the "Encyclopedia" writes, geometry has often been misused in disciplines that by their nature are alien to mathematical calculus; thus works were composed in the geometric manner (i.e., arrangement of material in the form of axioms, theorems, conclusions, etc.) which contain anything but certain truths. Their authors imagine that they have defined the essence of things by using geometric terms or have proven something simply because they used "Q.E.D." Geometry, however, becomes a certain science not through its method alone, but through the evidence and simplicity of its object.⁹²² This implies that the object of metaphysics, unlike that of geometry, is capable of no clear and distinct comprehension. Maupertuis, who regards immaterial substances as the object of

⁹²⁰ *Enquiry*, XII = p. 162.

⁹²¹ *Treatise*, Introduction.

⁹²² *Encyclopédie*, I, 552 B–553 A (Application).

metaphysics, thinks that this is indeed important and interesting—but the more important the objects of knowledge are (here obviously an allusion is made to the *dignitas obiecti*), the harder knowledge is to attain and the more uncertain it remains. Great caution is necessary when we betake ourselves into this area; in any case, the conviction is false that the application of mathematical method guarantees mathematical certainty here.⁹²³

Voltaire also rejects the coupling of mathematics and metaphysics. Some forget, he says, that mathematical quantities are abstractions from sensible and material data, and try to introduce metaphysics into mathematics by speaking of points without extension, lines without width, infinitely divisible units, etc. Because of the origin of mathematics from experience, however, an interference of metaphysics here is inadmissible. Metaphysics is, after all, nothing other than an amusing novel, while geometry requires exact measurements and efforts to which dreamy and lazy minds do not want to subject themselves. The object of metaphysics lies *trans naturam*; and if nature is matter, then the metaphysical is the immaterial, i.e., it is the soul and the spirits, which allegedly sense without sense organs and think without a head—and finally God, whom our pride thinks it can grasp and define.⁹²⁴ But what is no matter and cannot be measured cannot be known either; if the term "metaphysics" is to have a meaning, then only the new one, which relates to epistemological questions.⁹²⁵ Voltaire repeats a few times the designation of metaphysics as a novel of the human mind and places others alongside it, such as "the realm of doubt": for although we know that many scholastic doctors have told nonsense, we nevertheless possess no truths to replace their errors. As long as we linger in the realm of metaphysics, we are condemned to swim in the sea of uncertainty, whose shores no man has ever seen. To form clear ideas about the objects of metaphysics is impossible for the simple reason that we are material and finite beings.⁹²⁶ The decisive contrast between empirically conditioned or finite human knowledge and the infinite immaterial object of metaphysics is asserted here once again. Agnosticism means the conviction that this contrast is insurmountable and will remain so.

It must now be emphasized that Kant's metaphysical agnosticism is also grounded in a specific evaluation of the function of the sensory factor in cognition, although Kant, as is well known, deviates from the empiricist main current of the Enlightenment insofar as he assumes the possibility of an *a priori* cognition or at least an *a priori* factor in cognition. In other words: for Kant's attitude in the question of agnosticism, it is not the assumption of an *a priori* cognitive factor that is decisive (Kant shared this assumption, moreover, though conditionally and in a different sense, with the representatives of traditional metaphysics), but rather the persistence

⁹²³ *Des devoirs de l'académicien* = *Oeuvres*, III, 294.

⁹²⁴ *Dictionnaire Philosophique*, Art. Métaphysique = *Oeuvres*, XX, 76.

⁹²⁵ Brief an Friedrich of April 17, 1737 = *Oeuvres*, XXXIV, 249.

⁹²⁶ See *Dict. Philos.*, Art. Dieu, Dieux (Sect. V) = *Oeuvres*, XVIII, 377, as well as the letters to Mme de Choiseul of Aug. 28, 1770 (= *Oeuvres*, XLVII, 177) and to M. M... of August 1776 (= *Oeuvres*, L, 75).

with which he pointed to the necessity of a cooperation of the mentioned factor with empirical data. The categories, i.e., the pure concepts of the understanding, can provide no concepts for the knowledge of objects if they are not accompanied by the rules of their application to sensibility, if they lack, that is, what Kant calls "schema".⁹²⁷ Although the categories, unlike the forms of intuition, do not stem from experience, they possess without experience even less significance than those forms, through which at least an object is given—while the categories in themselves contain merely the logical form of the connection of the manifold of intuition into a consciousness.⁹²⁸ For this reason, the independence of the categories from experience cannot signify an ability of the pure understanding to activate itself without any help from experience or even beyond all experience. As Kant explains, pure concepts of the understanding can never find transcendent, but only empirical use; likewise, the principles of the pure understanding can relate only to the general conditions of a possible experience and to objects of the senses, but not to things in themselves, which are independent of any intuition. Since now that which is no appearance also cannot become an object of experience, pure understanding is incapable of crossing the boundaries of the empirical world, within which objects are given to us.⁹²⁹ However, the following occurs: as often as the understanding speaks of appearances, it simultaneously creates in contrast to this the idea of things in themselves, and it imagines that it can form concepts of these by applying the categories to them; thus it errs and regards the quite indeterminate concept of an intelligible quantity (i.e., a quantity that is no appearance and is therefore outside the realm of experience) as a determinate concept of a being that can be known by the understanding. To counter this confusion, Kant distinguishes between the intelligible in the negative and the intelligible in the positive sense. The former is defined by the negative criterion that it represents something that cannot become an object of our sensible intuition, while the latter counts as an object of a non-sensible, i.e., intellectual intuition. If man possessed the gift of such an intellectual intuition, he would be *ipso facto* capable of bridging the gap between pure concepts of the understanding and objects of sensible intuition, or of knowing the intelligible or the thing in itself; but he does not possess it and must therefore move in the realm of empirical appearances as this is shaped by the cooperation of understanding and sensible intuition.⁹³⁰

Precisely because of its logical connection with empiricist epistemology, the agnosticism of the Enlighteners went hand in hand with a sharp critique of all abstraction: since we can only know what is attested by the senses, abstractions that go beyond this our horizon of knowledge cannot relate to the knowable. Metaphysical terminology thus appears as the product of a series of

⁹²⁷ A, 245.

⁹²⁸ B, 305 f.

⁹²⁹ B, 303.

⁹³⁰ B, 306 f.

illegitimate abstractions to which no empirical datum corresponds. By reducing scholasticism to syllogistics,⁹³¹ the Enlighteners trace the entire conceptual instrumentarium of metaphysics back to its unrestrained inclination to improvise freely with concepts, thereby losing sight of reality and losing itself in the abstract and obscure. Only metaphysicians are permitted to be obscure, writes Diderot ironically. Their generalizations withdraw every empirical content from concepts, so that the images of objects finally dissolve and concepts become pure things of thought.⁹³² This applies primarily to the so-called first principles, the knowledge of which metaphysics claims to be. Condillac subdivides them into two classes (on the one hand general and abstract axioms, such as "something cannot possibly be and at the same time not be," "from nothing comes nothing," etc., and on the other hand hypotheses for the explanation of things that must otherwise remain inexplicable) and opposes to them the inductive procedure and the collection of secured facts as the only healthy working method of philosophy.⁹³³ For the empiricist Condillac, the fight against metaphysics and the rejection of intellectualism are two sides of the same coin. Innate ideas and deductive procedure are rejected with the same anti-metaphysical intention: for the ultimate metaphysical principles are presented as innate, while at the same time everything else is derived from them. In contrast to the specific and concrete principles of science, the general and abstract principles of metaphysics appear vague and hardly applicable. Even if they are correct in themselves (e.g., "what is, is"), they are empty and non-binding in practice—of which, moreover, the endless disputes among metaphysicians themselves bear witness. Such philosophers are, of course, incompetent and superfluous.⁹³⁴ From the practical-utilitarian standpoint of the Enlightenment, the heavy accusation had to be raised against metaphysics that, because of its abstract character, it was a parasitic, if not directly harmful phenomenon. And it is a tragic irony in the fact that the conservative opponents of the Revolution and the Enlightenment after 1789 adopted this same language usage, designating the theorists of natural law and the natural equality of men as socially parasitic metaphysicians who sought to subject the world of experience to abstract schemas.⁹³⁵

b) Metaphysics as Abuse of Language

The critique by the Enlighteners of the language of metaphysics crosses at many and important points with the much older corresponding critique by the Humanists, and yet it does not constitute a conscious intellectual-historical continuation of the latter. The Humanists investigated language within the framework of rhetorical questions and regarded it as an organ,

⁹³¹ *Encyclopédie*, XIV, 775 B (Scholastique).

⁹³² *De l'interprétation de la nature*, XL = *Oeuvres*, II, 39.

⁹³³ *Traité des Systèmes*, I = *Oeuvres*, I, 121 A–122 B.

⁹³⁴ *Op. cit.*, II = *Oeuvres*, I, 124 A–125 B.

⁹³⁵ Hamm, *Burke and Metaphysics*.

but also as a crystallization of the social intercourse of human beings; the Enlighteners, on the contrary, were driven to the study of language by problems posed by the acceptance of an empiricist epistemology. If the source of all knowledge was seen in the senses, then the transition from the senses to higher mental functions had to be explained satisfactorily, which obviously move on levels that are not those of mere sense data. This explanation is now undertaken by means of a theory about signs—primarily linguistic ones: signs initially represent individual sense data, but gradually become independent, disguise and combine themselves in such a complicated way that their origin falls into oblivion. The sign theory presupposes, of course, the old anti-metaphysical thesis that thinking is basically an operation of addition and subtraction.⁹³⁶ Therefore, it implies that metaphysical errors do not arise if our complex ideas (i.e., those we express through multiple or general signs) are composed additively and form transparently structured sums of simple ideas (signs) with direct empirical reference. From this additive-subtractive handling of language and its signs, the final elimination of the basis of all metaphysical terminology, namely abstractions, is also expected. Critique of the language of metaphysics thus means primarily critique of linguistic abstractions, which usually constitute the preliminary stage to an arbitrary hypostatization of fictitious contents.

Although the critique of abstractions and the hypostatization thereof was already a hobbyhorse of the Humanists, the thematic complex just described appears in logically closed form only on the basis of an elaborated empiricist epistemology, specifically in Hobbes. The Enlighteners draw, however, from Locke, who largely utilized Hobbes's preliminary work from his standpoint, even if for understandable reasons he avoided references to his notorious compatriot. It is significant that an entire part (of four) of Locke's main work is dedicated to the philosophical investigation of the language problem, the importance of which Locke was no less aware of than our contemporary philosopher-linguists.⁹³⁷ The more complex our mental functions become and the more things or more general truths we want to grasp at once, the greater becomes the danger of a detachment from the reality of the world, which ultimately consists of individual things. This detachment is reflected in the mechanisms of language, but is also caused by them. Locke distinguishes between the unavoidable imperfection and the abuse of language,⁹³⁸ he knows, that is, that regardless of whether an abuse of language is present or not, every shift from the level of things to the level of language *eo ipso* lets things slip out of view. The dilemma is formulated very beautifully: if I give things no names, I can say nothing about anything; if I do so, however, then I automatically arrange things into a certain class, thus

⁹³⁶ On this view in Nizolio and Hobbes, see Chap. I, Sect. 4d, and Chap. II, Sect. 4.

⁹³⁷ See *Essay*, III, 9, 21.

⁹³⁸ He devotes special chapters to the investigation of each of these two questions, *Essay*, III, 9, 10, and IV, 6.

set up abstract ideas and undermine my own goal, i.e., the grasping and linguistic representation of reality; the only possible way out is the endeavor to speak of things as they were created by nature according to our view.⁹³⁹ Precise names can be assigned only to concrete individual things.⁹⁴⁰ The categories of genus and species are called into life conventionally, i.e., humans here do not follow nature, but rather their own convenience, which urges them to create a usable term—incidentally in agreement with the actual purpose of language, which consists in the easiest and fastest possible communication.⁹⁴¹ The unclarity of names can be more or less unavoidable in "mixed modes" (i.e., in combinations of heterogeneous simple ideas), which are relatively free products of the mind and follow no natural patterns. For the opposite reason, the names of substances are unclear: here there are indeed natural patterns, but these are not (with certainty) knowable, and their designations therefore vary or fluctuate. The names of substances refer, in other words, either to what Locke calls real substances and is anyway unknowable, or to an ensemble of coexisting properties which we know imperfectly and moreover mix with the properties of other substances.⁹⁴² In general, it is the case that simple ideas and simple modes have the most unambiguous names, while mixed modes and substances carry the least certain ones.⁹⁴³

Locke lists seven fundamental abuses of language, which we can divide into the most common ones and those that are rather connected with the terminology of scholastic-Aristotelian metaphysics, i.e., the direct philosophical opponent of the English philosopher. To the first group belong: a) the unstable use of words, i.e., their different use according to the needs of the moment;⁹⁴⁴ b) metaphorical speech, which is permitted only when the goal is pleasure, not knowledge, but must be avoided just like any rhetoric if one wants to speak of things as they are;⁹⁴⁵ and c) the defective clarification of the sense of words, which often goes back to the conviction that this sense would be evident, i.e., the one we attribute to words according to our habits and our upbringing; against the background of this conviction, however, no philosophical conversation can be conducted, in which clear ideas and, correspondingly, apt names are indispensable.⁹⁴⁶ The second of the groups mentioned above comprises: a) terms to which correspond either unclear ideas or none at all. The former (such as "glory" or "wisdom") are accompanied by confused conceptions, and the reason for this is often that people learn them before they familiarize themselves with concrete corresponding ideas. The latter

⁹³⁹ *Op. cit.*, IV, 6, 43.

⁹⁴⁰ *Op. cit.*, IV, 6, 42.

⁹⁴¹ *Op. cit.*, IV, 6, 32–33.

⁹⁴² *Op. cit.*, III, 9, 11–14.

⁹⁴³ *Op. cit.*, III, 9, 18–20.

⁹⁴⁴ *Op. cit.*, III, 10, 5.

⁹⁴⁵ *Op. cit.*, III, 10, 34.

⁹⁴⁶ *Op. cit.*, III, 10, 22–31.

(*insignificant terms*) are coined above all by founders of philosophical or religious sects who seek to hide their own ignorance or their confused ideas behind them;⁹⁴⁷ b) unclarities due to the erroneous use of old words in a new sense or due to the introduction of new, as yet unclarified terms. In this aberration, too, the scholastics have distinguished themselves through their artful dialectical exercise, the *disputatio*. Where the ability for *disputatio* is considered a mental asset and admired accordingly, the distortion of the sense of words and the creation of neologisms is encouraged, which counts as acumen, although in reality it does not promote the knowledge of things and harms the understanding of people;⁹⁴⁸ c) transformations of names into things. This transformation occurs with all names, but predominantly with the names of substances. The adherents of various philosophical schools want to prove the truth of the doctrines represented by them by identifying the terminology used in each case with the essence of things, as the Peripatetics did with the ten categories or the Platonists with the world soul;⁹⁴⁹ d) uses of words for things they cannot possibly mean. The most common such case exists when we assume, at least tacitly, that the names of nominal substances mean the real ones. Since we cannot know real substances anyway (which is why our statements about them must be unclear), our mind, which wants to overcome its ignorance by all means, tries to grasp them by giving the term used for it the corresponding meaning. And although this term actually means only a complex idea of interconnected properties, we nevertheless assume that it names that substance on which those properties depend. When people speak of a substance, they use the same name for it, even if everyone understands different things under its complex idea. Nevertheless, they do not have the feeling that what they are talking about varies each time, and the reason for this lies in their connection of the name with a real, stable, and unalterable substance. This abuse of language goes hand in hand with two philosophical errors that are characteristic of traditional metaphysics: first, that nature creates things on the basis of uniform stable patterns, so that we can classify them relatively easily into objective categories, whereby we must overlook that the individuals of the same category differ from one another; and second, that we can recognize these patterns or the ontological constitution of things.⁹⁵⁰ Obviously, the field is taken here against the Platonic and Aristotelian ontology of the Idea or Form within the framework of the rejection of the metaphysical cognitive claims of the intellect. Language critique thus supports the agnostic results of empiricist epistemology.

As Berkeley thought, Locke could not lead the critique of abstractions to its consistent end because of his adherence to the concept of substance. Therefore, he fights abstract ideas by arguing against what he considers Locke's compromise on this neuralgic question. He accepts,

⁹⁴⁷ *Op. cit.*, III, 10, 2–4.

⁹⁴⁸ *Op. cit.*, III, 10, 6–13.

⁹⁴⁹ *Op. cit.*, III, 10, 14.

⁹⁵⁰ *Op. cit.*, III, 10, 17–21.

nevertheless, the genetic relationship between language and abstraction as described by Locke and attempts to explain it by two factors. First, he writes, we must distinguish between the definition of a linguistic term and its meaning; the definition should always remain the same, but the meaning varies, since each term does not constantly express the same sensible idea. Thus, for example, the definition of the triangle remains the same, but its meaning varies according to the ideas (particular shape, size, etc.) we associate with it. By erroneously attributing a single meaning to every term, we gain the impression that there are general-abstract and at the same time precisely defined ideas as the meaning of every general term. Thereby we allow the abstract construction, which crystallizes in a single linguistic term, to cover up the existing concrete properties and ideas.⁹⁵¹ Second, from the correct view that we communicate our ideas through language, the wrong conclusion has been drawn that our words would always have a meaning; if therefore the terms used have no precise meaning and express no concrete idea, then it is unreflectively concluded that they must mean some abstract idea.⁹⁵² In this way, the mechanisms of language favor the emergence and consolidation of abstractions. Furthermore, language stands in the way of a precise grasping of things because it serves not always for the communication of ideas, but also for the exciting of passions and feelings or certain moods, the expression of admonitions or prohibitions, etc. This constant abuse of language obscures it and reduces its undisputed usefulness. If we could free ourselves from the multiple abstractions and limit our thoughts to ideas without words, we would hardly commit errors.⁹⁵³

Condillac, who follows Locke in this regard, considers abstractions as practically unavoidable, since our finite mind cannot survey all individual things simultaneously, but requires certain abbreviations and summaries. The tragic error of philosophers lies, of course, in the hypostatization of these unavoidable abstractions. Thus have arisen, for example, central concepts of scholastic-Aristotelian metaphysics such as genus, species, or substance, which want to represent not merely sums of ideas of the senses or thought, but tangible realities.⁹⁵⁴ Even the most abstract terms, however, proceed from names we give to perceptible things. People correlate their new knowledge with that already existing, and this joining of the less familiar and the well-known promotes memory and imagination. Such correlations are undertaken especially between physical and mental processes, so that features of the former are ascribed to the latter—and indeed in a metaphorical and inaccurate manner. The terms "spirit" and "soul" are themselves products of metaphorical ways of speaking. The sensory origin of terms designating mental functions, however, falls into oblivion, and we think that these terms

⁹⁵¹ *Principles*, Introduction, § 18.

⁹⁵² *Op. cit.*, § 19.

⁹⁵³ *Op. cit.*, §§ 20–22.

⁹⁵⁴ *Essai sur l'origine etc.*, I, 5 = *Oeuvres*, I, 48 B–50 A.

actually refer to such functions and even explain their essence, although it concerns here at best very meager analogical expressions.⁹⁵⁵ The free and metaphorical use of language shapes, moreover, our habits of thought even before we are clear about them. When we reach the mature age and begin to philosophize, we are already impregnated with the language of everyday life, and indeed this has happened under more or less accidental circumstances that have accustomed us to certain words and a certain use of them. Habit makes us forget the conventional character of words, and it also induces us to connect words with the true constitution of things in one way or another—especially since our empty pride likes to believe that we can recognize this constitution. Our passions and prejudices thus seek and find their philosophical disguise.⁹⁵⁶

Condillac views metaphysical systems as offspring of false and misleading language use. To construct such a system, he writes, a single word is needed whose vague meaning allows any interpretation; if we have several such words instead of one, then the system in question becomes certainly more extensive and more worthy of those philosophers who consider their own mind capable of mastering everything.⁹⁵⁷ In other cases, metaphysicians do not start from a word, but from a central fixed idea; then they seek and find the words that have to do with this idea, interpret them according to their purposes, and thereby set an entire syllogistics in motion; and for fear that one might consider all this time and effort lost, they conclude finally that their verbal definitions would represent definitions of things.⁹⁵⁸ Against this logically unacceptable mode of construction of metaphysical systems, Condillac opposes an inductive method that rests on two fundamental anti-metaphysical theses: substance represents, at least from our view, a mere ensemble of sensible properties,⁹⁵⁹ and thinking consists in a series of additive-subtractive operations; within this framework the problem of language is also solved. Meaningless battles over words break out because opponents associate simple ideas of unequal number or different constitution with the same linguistic term. Such battles are usually those fought over substances. Unable to determine the exact number of simple ideas that make up the concept of a substance, some assume a larger, some a smaller number. But since all use the same term, they overlook that each of them has different simple ideas in mind, which of course does not exactly promote understanding. Words prevail, become familiar to us, and deceive us—and philosophers make all this only worse by putting new unclear words into circulation for their own use or for the use of their school.⁹⁶⁰ How, however, can we give ideas their correct name?

⁹⁵⁵ *Op. cit.*, II, 1, 10 = *Oeuvres*, I, 87 A–88 A.

⁹⁵⁶ *Op. cit.*, II, 2, 1 = *Oeuvres*, I, 105 AB.

⁹⁵⁷ *Traité des Systèmes*, VII = *Oeuvres*, I, 145 B.

⁹⁵⁸ *Op. cit.*, III = *Oeuvres*, I, 129 B.

⁹⁵⁹ *Essai sur l'origine*, I, 11 = *Oeuvres*, I, 91 A.

⁹⁶⁰ *Op. cit.*, II, 1, 10–11 = *Oeuvres*, I, 88 B, 90 A, 91 A.

First, we take as a basis the simplest elements, i.e., the simple ideas that correspond directly and unmistakably to a certain perceptible thing. Then we add or subtract until the term in question attains a scope that does not exceed the ascertainable correspondences with real objects, for otherwise we are already in the realm of metaphysical entities. through this additive-subtractive and combinatorial work, we form certain complex ideas and know simultaneously the exact content of every name.⁹⁶¹

Like Locke and Condillac, d'Alembert, their pupil in epistemological questions, learns the role of language for philosophy in his struggle against scholastic-Aristotelian abstractions. D'Alembert is just as interested in proving that abstract concepts are more or less illegitimate extensions or autonomizations of concrete sensations and ideas. Thus, for example, the concept of "existence" is formed first on the basis of self-consciousness, which stems from our own feelings and thoughts; then we assume that this self-consciousness can be separated from the subject with which it is originally connected, and thereby we gain the abstract idea of existence, which we apply to other beings. The study of such and similar processes can preserve us from the error that abstract ideas would exist as independent entities, like the scholastic universals. In the world, there are only single individual beings with various properties. Our thought separates each of these properties from the others with which it is together in the same subject, and considers it in its isolation from this subject, so that it appears to be autonomous. The antidote against such fictitious autonomizations lies for d'Alembert in the genetic investigation of our ideas, i.e., in strict adherence to empiricist epistemology.⁹⁶²

As an empiricist, d'Alembert believes moreover that the danger of error lurks not so much in ideas that stem from the senses, but much more in the ideas of the intellect—and this is because the mechanisms of language hardly facilitate a knowledge of the actual constitution of the latter; often language even makes difficult the adequate description of ideas that relate to the sensible. General characteristics of languages are on the one hand poverty, on account of which one word is used for several things and whereby the literal sense is lost, and on the other hand imperfection, as a result of which almost all intelligible ideas must be formulated through metaphysical expressions that were originally intended to render sensible objects linguistically. This constitutes, of course, an additional indication of the sensory origin of abstract ideas, but the difficulties arising therefrom remain. Anticipating the reservations of the late Wittgenstein against the language ideal of logical positivism, d'Alembert does not believe that the evil can be remedied by an artificial-conventional abstract language. He wishes, of course, for the furthest possible elimination of metaphysical expressions from "metaphysical" research, but their total elimination would require the creation of a super-exact language whose terms would be

⁹⁶¹ *Op. cit.*, II, 2, 2 = *Oeuvres*, I, 106 B–108 B.

⁹⁶² *Eléments*, *Eclairc.* II = *Oeuvres*, II, 51, 52 f.

unintelligible to people; therefore the most practicable solution would consist in the use of everyday language while avoiding its abuse.⁹⁶³ With regard to this cleansing of everyday language, d'Alembert studies the scope of the meaning of words. Every word has a literal, a metaphorical, and a wider sense that lies somewhere between the first two. D'Alembert recommends the attentive study of transitions from one word sense to another and mentions several examples of semasiological shift.⁹⁶⁴ His conclusion is that most words of a language resist clear scientific use—for some, such use proves even to be impossible. Nevertheless, he thinks, language did not arise arbitrarily, although arbitrariness played a role in its formation; the task of the philosopher consists precisely in the localization and elimination of this role.⁹⁶⁵ It is also the duty of the philosopher to sacrifice all rhetoric in favor of the clear exposition of ideas in their natural series, as this latter concretizes itself in the ordered sequence of the syntactic components of the sentence (subject, verb, or predicate).⁹⁶⁶

Significant for the importance of language analysis in the anti-metaphysical struggle of the Enlightenment is the fact that Maupertuis investigates the question of substance within the framework of his treatise on the philosophy of language. He wants to describe the origin of the concept of substance in language and prove its exclusively linguistic existence. In the analysis of our ideas, we find that some elements are common to them or occur more frequently. For these elements we create a linguistic sign, and we regard them as the basis or substrate in which the remaining, i.e., the variable elements of our ideas are grounded, to which another linguistic sign is attached. Thus arises the idea of substance and its modes. Maupertuis doubts that there is any other difference between substance and modes besides this one, and he also does not believe that the former can be thought at all without the latter. The way we define substance seems to him, moreover, relative: were the whole world green, we would not count the green color as part of the substance of the plant. If, on the other hand, we wanted to say with the Cartesians that the substance of the tree lay in its extension, then we would merely be following the misleading hint of language, which tends to associate a tree rather with a certain form than with a certain color; were there a word that would establish a necessary and exclusive connection of the tree with the green color, we could take extension out of its substance. Be that as it may: whatever I subtract from my idea of the tree, I only make it poorer, and this points once again to the closest connection of substance and modes. But something else comes to light here: that some consider as substance what is mere mode to others, and vice versa.⁹⁶⁷ Maupertuis also regards certain judgments as linguistic condensation of different, separate ideas or perceptions,

⁹⁶³ *Op. cit.*, 57, 61.

⁹⁶⁴ *Op. cit.*, *Eclairc.* IX = *Oeuvres*, II, 249 ff.

⁹⁶⁵ *Op. cit.*, 262 f.

⁹⁶⁶ *Op. cit.*, *Eclairc.* X = *Oeuvres*, II, 282.

⁹⁶⁷ *Réflexions philosophiques sur l'origine des langues...*, XIV–XVIII = *Oeuvres*, I, 270 ff.

which likewise often result in hypostatizations. Were I, for example, capable of remembering every single impression of a certain thing, I would need no judgments such as "there is a tree," which in reality summarize several impressions (I saw the tree, I was there, I came back, I saw the tree again, etc.), although they not infrequently give occasion to allegedly profound investigations into the concept of existence etc.⁹⁶⁸ To defend these theses against the accusations of those who feared the theological consequences of extreme nominalism, Maupertuis refers to Berkeley,⁹⁶⁹ whose pious disposition was above all doubt. Nevertheless, he is careful not to extend his agreement with Berkeley to the question of immaterial substances, for example, and even remarks that Berkeley tries to tear down from above that building which he, Maupertuis, wants to destroy in its foundations. By this he obviously means his theory about the fine imperceptible transitions from perception to idea and then to the sign, which becomes autonomous and sets in motion a combinatorial activity that has hardly anything to do with the original sense data anymore. Maupertuis attaches such great importance to the theory of linguistic signs that he believes in the possibility of explaining with its help not only the deviations of this or that abstract philosophy from reality, but also the specific character of the philosophy of each people. This character, he writes, is not to be traced back to the peculiarity of perceptual data, but to the specific constitution of language. The transformation of the various elements that make up our perceptions into signs can be undertaken on the basis of different combinations; it was therefore carried out by the first humans in different ways, so that after the formation of different races and nations different results, i.e., different worldviews, have emerged.⁹⁷⁰

The public opinion of the Enlightenment represented the conviction that metaphysics and its language rely on metaphors and abstractions.⁹⁷¹ This conviction is also reflected in the relevant articles of the "Encyclopedia," in which metaphor and abstraction are even treated together, since it is assumed that they represent related phenomena or rather two aspects of the same phenomenon. Let us consider first how metaphors form and hypostatize. The habit of naming real objects seduces us into doing the same with regard to abstract ideas and speaking of them as if they were really existing. Formally seen, of course, the language of illusions and errors coincides with the language of truth. Put differently: the expressions we use to communicate to others ideas of real objects as well as abstractions or constructions of our mind are outwardly completely analogous to one another. We say "idea" or "death" just as we say "sun" or "moon," although the former two do not exist. In this way, a series of metaphorical expressions arises. The ancients hypostatized love, fear, or health, and we say "I have fear, hunger, etc.," as if these

⁹⁶⁸ *Op. cit.*, XXIV–XXV = *Oeuvres*, I, 278–280.

⁹⁶⁹ *Réponse etc. II*, VI = *Oeuvres*, I, 298 f., 305.

⁹⁷⁰ *Réflexions etc.*, XIX = *Oeuvres*, I, 275 f.

⁹⁷¹ Joubert, *Textes*, 155.

were tangible beings. Poets personified abstract terms, but Plato or the Scholastics did the same. We live, therefore, in a real land and yet we speak the language of the land of abstractions. Only the names of objects have real coverage, all others are formed by imitation; therefore the former must be called "natural," the latter "metaphysical".⁹⁷² As we see, the designation "metaphysical" is reserved here for that which lies beyond the realm of sensible objects—regardless of whether it concerns innocent metaphors or Platonic ideas. The distinction between natural and metaphysical names corresponds to that between natural and metaphysical adjectives, which is found in another article of the "Encyclopedia." Natural adjectives relate to properties that can be perceived through the senses—although sensible properties do not exist objectively in things themselves so that they could produce something analogous to our sensation, but sensation arises on the basis of the constitution of our sense organs and general natural laws. Metaphysical adjectives relate, on the other hand, to concepts or evaluations that our mind creates about things and which depend on its respective perspective; they include words such as ordinal numbers (the "first" e.g., which from the opposite view appears as the last), possessive pronouns ("mine," which however can become "yours" or "theirs") or adjectives that signify a relation (large, small, etc.).⁹⁷³

The antithetical pair of concepts "natural-metaphysical" was furthermore used to designate abstractions themselves or to subdivide them into two groups. Before we look closer at this subdivision, we must remember that the vast majority of Enlighteners, following Locke and Condillac (not Berkeley) here, fundamentally recognize the practical necessity of abstractions as a means of social understanding and as an instrument of science. Accordingly, abstracting is viewed as a function of the mind that springs from the need to name not only real objects but also concepts and ideas. Abstract nouns are formed, for example, to name the aspect in which several objects are similar and which simultaneously represents the reference point of all our impressions in this regard (this aspect of similarity of several white objects, e.g., is called whiteness).⁹⁷⁴ Now, abstraction can relate not to several objects, but to a single one, and then it constitutes an analytic investigation of every single property of it. Based on this criterion, one can distinguish between "natural" and "metaphysical" abstraction. The former is used when we want to examine individual objects more closely and for this purpose distinguish them from one another and simultaneously analyze specifically every single one of the simple ideas that make up their respective idea. This abstraction is called "natural" because each of the mentioned ideas has a real correspondence in the object from which it is separated by abstraction. Natural abstraction is abused when we ascribe an independent existence to the individual ideas that we

⁹⁷² *Encyclopédie*, I, 46 A–47 A (Abstraction).

⁹⁷³ *Op. cit.*, 183 AB (Adjectif).

⁹⁷⁴ *Op. cit.*, 45 AB (Abstraction).

isolated from one another for analytical purposes.⁹⁷⁵ We resort to "metaphysical" abstraction, now, because "natural" [abstraction] does not permit going beyond the individual object, although experience shows its multiple connection with others. "Metaphysical" abstraction is that activity of the mind which isolates in an object a property that it shares with others, and forms a general idea that stands for no single object but summarizes features that serve as a criterion for connecting several objects into a group. Through this generalization procedure we grasp the world, i.e., we divide things into manageable classes, etc. It must not be overlooked, however, that this kind of abstraction is a result of the impotence (and not the power) of human thought, which unlike the divine intellect cannot grasp all individual objects directly and simultaneously. As a result of this impotence, the abuse of "metaphysical" abstraction occurs easily: the hypostatization of genera and species represents precisely such an abuse,⁹⁷⁶ as we already know. We also know in which linguistic phenomena such abuse is reflected.

c) Sociological Critique of Metaphysics

Sociological critique of metaphysics arises during the 18th century within the framework of sociological critique of religion. The establishment of close relations between religion and metaphysics was, of course, much older and could easily be substantiated by the well-known example of scholastic-theological Aristotelianism. Before the 18th century, however, the web of religion (theology) and metaphysics was countered not by sociological, but by (profane or fideistic) agnostic arguments. The formation of a sociological type of critique presupposed the intensification of the struggle against (established) Christianity, as it became noticeable in the 18th century. Many Enlighteners, who regarded their own struggle against theology and the church not merely as a philosophical but as a social and political matter, used corresponding arguments—foremost among them the theory of the interplay of despots and priests for the purpose of ideological underpinning and thus practical facilitation of the subjugation of peoples to the selfish will of their masters. The replacement of older agnostic arguments by social and political ones—or, in very many cases, the supplementation or enrichment of the former by the latter—let the web of religion (theology) and metaphysics appear in a new light, so that the special function of metaphysics could be evaluated from the perspective of new polemical intentions and new theoretical interests. Metaphysics appears here, then, as the philosophical appendage of religion, as the rationalization of theological beliefs or myths with the help of a secular conceptual framework. Furthermore, the kinship of metaphysics and religion seems to extend not only to the origin of their contents but also to their concrete social effect. To the extent that the object of traditional metaphysics is seen in immaterial substances (not so much because of the separation of metaphysics and ontology already common in the 17th century,

⁹⁷⁵ *Op. cit.*, Supplément, I, 66 B–67 B.

⁹⁷⁶ *Op. cit.*, 68 B–71 A.

which hardly attracted the interest of the Enlighteners, but rather as a result of the anti-metaphysically intended revaluation of the sensible world), and also to the extent that its epistemological competencies are transferred to "metaphysics" in the new sense or to the method of mathematical natural science, its only remaining task is the defense of the cornerstones of religion, namely God and immortality. Most Enlighteners direct their attention to this point and, by displaying their indifference to the distinctions between general and special metaphysics which in their opinion are hair-splitting and empty, they denounce the quasi-religious function of metaphysics in all its forms and expect its withering away simultaneously with that of religious superstition. For them, metaphysics is the artificial religion of the educated, just as religion represents the naive metaphysics of the uneducated. Religion, writes Joubert, is the only metaphysics that the uneducated can understand and appropriate; the pious are the practicing metaphysicians.⁹⁷⁷

The fact that metaphysics was now subjected to the same social and political critique whose primary target was (established) Christian religion, enabled the anti-metaphysical use of arguments that originally—i.e., already in the 16th and 17th centuries—had been adduced in the context of anthropological and historical analyses of the phenomenon of religion. It is well known with what irony Montaigne, for example, had spoken of the anthropomorphic conception of God, in which he saw a vain substitute for our incurable ignorance with regard to everything supersensible,⁹⁷⁸ or in what way Hobbes explained the origin of religion from feelings of fear of the unknown, from the attempt to compensate for ignorance of the natural causes of phenomena, and from the desire to appease invented omnipotent spirits.⁹⁷⁹ There were metaphysical constructions that actually exhibited these characteristics of religion and could therefore be analyzed genetically-historically in a similar way or fought with similar arguments. Such a construction was, for example, that of final causes, which moved often on the border of metaphysics and theology and interpreted the universe anthropomorphically by projecting into it the needs, hopes, or cognitive perspective of man, thereby throwing moral, psychological, and cosmological factors into one pot. Buffon's critique of Plato's noble but, as he thinks, empty reveries remains typical in this regard. According to Buffon, the theoretical supports of Platonic philosophy are two, i.e., the hypostatization of abstractions and the doctrine of final causes. To the former, he opposes as a good Enlightener genetic-empiricist epistemology. Final causes are also abstractions in his eyes, but of a moral character (*abstractions morales*)—ones, that is, which have hardly anything to do with purely theoretical questions, but are connected with a consideration of things from a human, all-too-human perspective. It concerns here, in other words, impermissible generalizations of arbitrarily established relationships that distort reality

⁹⁷⁷ *Textes*, 154.

⁹⁷⁸ *Essais*, II, 12 = I, 574.

⁹⁷⁹ *Leviathan*, XII.

by throwing together the objects of our senses, perceptions, and cognitions with those of our feelings, passions, and desires.⁹⁸⁰ It is not of interest here whether a theory of final causes in Buffon's sense is actually found in Plato; the description undertaken by him of certain basic features of metaphysical thought has, in any case, a fundamental character.

The dissemination of the view that metaphysics, religion, and even superstition are related and interdependent things makes it understandable why Condillac deals with the belief in divination in the most natural way within the framework of a work dedicated to the critical analysis of abstract metaphysical systems. The point of contact of such systems with divination and the worldview underlying it lies in the mutual, albeit outwardly different, appeal to imaginary causes for the explanation of world events—an appeal grounded more in passions than in reason. To interpret this phenomenon, Condillac attempts to reconstruct the psychic state of man in an early phase of his historical development, when science and technology could not yet protect him from blind natural forces. The constant shifting from pleasure to pain and from hope to fear set his thinking in motion and forced it to search for the causes of his suffering and for the means to overcome them. Since he could not find the real causes, he substituted imaginary ones, and thereby filled the world with good and evil spirits. Out of fear of them and out of the desire to appease them, superstitious ideas arose; it was believed, for example, that celestial bodies would influence human affairs and that behind natural phenomena stood superhuman forces guiding them according to their own plans. Later, philosophy produced doctrines that favored such superstition, while politics for its part also contributed to the social consolidation of superstition by harnessing divination and astrology for its purposes.⁹⁸¹ Although this interpretation by Condillac rests at least partially on factors that could be designated as constants of human nature (pleasure-pain, hope-fear), it must nevertheless be classified as sociological rather than anthropological. For Condillac is convinced that religious superstition and traditional metaphysics are products of certain historical developmental phases of man, in which empirical observation and experiment played hardly any role, while philosophers undertook arbitrary interpretations of phenomena based on metaphors and analogies; thus, in their inability to explain the origin of our ideas scientifically, they imagined these were innate.⁹⁸² The metaphysical error constitutes, therefore, no inescapable fate that goes back to the unalterable constitution of man, but it can be overcome both by the gradual mastery of nature and by the improvement of social organization.

In Hume, we do not always encounter the same certainty regarding the historical prospects of man, but on the other hand there exists the conviction or at least the expectation that the work

⁹⁸⁰ *Histoire générale des Animaux*, V = *Oeuvres*, 256 B–258 B.

⁹⁸¹ *Traité des Systèmes*, V = *Oeuvres*, I, 134 A–135 A.

⁹⁸² *Op. cit.*, V and VI, 1 = *Oeuvres*, I, 140 B–141 B.

of the new philosophy will contribute to the formation of a worldview free from religious and metaphysical superstition. But regardless of his assessment of the future of metaphysics, Hume shares the explanation of its origin from extra-logical factors. Metaphysics arises, then, not only from empty human pride, which sets all levers in motion to explain the inexplicable, but also from popular superstition, when the latter prefers to step onto the stage in conceptual disguise rather than naked. As Hume says in a vivid simile, superstitious ideas hide like robbers in the forest, and from their caves they commit assaults to which many fall victim⁹⁸³—to put it more clearly: metaphysics veils superstition and its influence by helping it to deceive those who would reject it in its pure state. We find the social and historical explanation of this interweaving and cooperation of metaphysics and (religious) superstition, not provided by Hume, in Voltaire's major historical work. Voltaire sees the object of traditional metaphysics in immaterial substances and accordingly parallels its development with that of ideas about the soul. The first humans, he writes, had confused ideas about the soul and therefore made no distinction yet between it and life in general as the capacity to think and act. How did the transition from this natural view to metaphysics take place? People who were exclusively occupied with the daily struggle for survival certainly did not possess sufficient knowledge to fall victim to the errors of philosophers, Voltaire remarks ironically. The idea of an immaterial being could not be put into the world by people who knew only matter. The development of society conditioned the emergence of a group of people who were freed from manual labor, thus had time and leisure for thinking. These people turned various experiences and phenomena, such as the appearance of the dead in dreams, into philosophical systems, even if this process took a long time: for even in Homer's time the soul was imagined as an ethereal image of the body, and perhaps Plato was the first to speak of purely spiritual beings.⁹⁸⁴ Voltaire criticizes Plato's obscurities and points to the mixing of Platonic and Christian spiritualistic views with mythical elements. The metaphysicians and theologians of antiquity, he thinks, were charlatans incapable of communicating with one another. This is proven by their central concepts: "metaphysics" points to something that stands above nature, and "theology" means the knowledge of God; but the supernatural and God cannot be known in any way. Such empty chatter was, however, unavoidable in a time when not even physics knew anything of observation and experiment; until Locke, therefore, metaphysics had to remain an area in which only chimeras could thrive.⁹⁸⁵ The reference to experimental science and Locke reveals that Voltaire, no differently than Condillac, views (traditional) metaphysics as a historical phenomenon with a beginning and an end. If in the past strangeness to experience and empirical methods enabled a veritable proliferation of metaphysics, the reverse path is now taken forever. And as for the theological underpinning of metaphysics, it is neutralized with

⁹⁸³ *Enquiry*, I = p. 11.

⁹⁸⁴ *Essai sur les mœurs*, Introduction, IV = *Oeuvres*, XI, 10 f.

⁹⁸⁵ *Dieu et les hommes*, XXXVIII = *Oeuvres*, XXVIII, 221.

agnostic arguments, which are supplemented by pointing out the (intellectual) historical presuppositions and consequences of the centuries-long alliance between theological and metaphysical spiritualism.

Sociological critique of metaphysics assumes particular sharpness among the Materialists. Since here the abolition of the separation between the Here and Now and the Beyond takes place totally and irrevocably, there remains no other way to explain the fact that such a great and cognitively completely unfounded illusion could arise at all than the way of history and sociology. The analyses of the Materialists regarding the social and historical character and course of metaphysics are not particularly detailed or fruitful, and the reason for this is that their metaphysics-critical statements, which interest us here specifically, are drowned out in the rattle of the great battle against religion. Given the fact that the main philosophical goal of materialism consisted in the safeguarding of the ontological monopoly of matter or in the complete elimination of the spirit (at least in the traditional sense), the question of the spirit was at the center of interest for the Materialists, and their attitude towards it yielded the criterion on the basis of which they conceived the relations between religion and metaphysics. In other words: if for the Materialists the problem of metaphysics largely coincided with that of religion, it was because (traditional) metaphysics and religion equally assumed immaterial substances. This equation of (Christian) religion and metaphysics under the common denominator of spiritualism is expressed very nicely in Holbach's definition of metaphysics: Metaphysics is that highly significant and sublime science with whose help everyone is able to obtain a thorough knowledge of the beautiful things that are inaccessible to his senses. All Christians are therefore thorough metaphysicians, and there is no gossip who does not know what a pure spirit, an immaterial soul, an angel, or effective grace is.⁹⁸⁶ Genetically seen, metaphysics constitutes a translation of myths, which revolved around the deification of natural forces, into the language of philosophical concepts. Originally, the rulers formulated ideas acceptable to them as myths or allegories, reserving the right to interpret them according to their interest, and at the same time being able to hide behind them their own ignorance of the causes of natural phenomena. In this early phase, poets function as the mouthpiece of the prevailing mythical worldview; they must, however, cede their place to metaphysicians and theologians from the moment the myth arrives at distinguishing between the world or matter and its motive forces, whereby God or the spirit is assigned the role of precisely these motive forces.⁹⁸⁷

A main feature of metaphysics for Holbach is the assumption of factors that can disturb or suspend the laws of nature, as God does, for example, through his miracles.⁹⁸⁸ If science is the

⁹⁸⁶ *Théologie portative...* = *Religionskritische Schriften*, 253.

⁹⁸⁷ *Système de la Nature*, I, 480–482, cf. 487.

⁹⁸⁸ *Op. cit.*, 72, note 1.

knowledge of natural law in its unalterable necessity, then metaphysics forms the direct opposite and the definitional negation of it. As negation of the scientific concept of lawfulness, metaphysics undermines, however, not only physics but also ethics, since according to Holbach the latter must also be based on the knowledge of the aspects of natural law relevant to man. The errors in the field of ethics result from the metaphysical consideration of man as a being consisting of spirit and body, without there being a mediation between these two; metaphysicians have made human nature unrecognizable by denying the decisive influence of the body on the soul and inventing all sorts of strange hypotheses, such as innate ideas or freedom of will.⁹⁸⁹ These metaphysical inventions fill language with abstract words that have no correspondence in the world of natural things. To compensate somewhat for the emptiness of concepts, a content derived from experience is unconsciously assigned to abstractions; if this is not the case, we can keep nothing in mind except this or that empty word.⁹⁹⁰ In Holbach's eyes, the errors contained in metaphysical views are so striking that their dissemination can be explained only historically and sociologically, not logically. For all have to do directly or indirectly with the idea of God, whose decisive and at the same time fatal social function is known. It is obvious that only a consistent Materialist could undertake a critique of metaphysics of such impact and intensity.

To sociological critique of metaphysics we can also reckon approaches that are more akin to what has been called "sociology of knowledge" in our century. Here, there is no talk of the origin of metaphysics from myth or religion and of its corresponding social function, but they deal with the activity and psychology of the concrete subjective carriers of metaphysics, i.e., metaphysical philosophers, their disciples, and their audience. As a motive for drafting metaphysical theories appears here above all the need for social prestige or for the exercise of (intellectual) power in a certain milieu. The price for obtaining such power remains, however, the adaptation of metaphysical constructions to the expectations of the environment and not least to prevailing fashions. Thereby it is proven from an additional perspective that metaphysics is always an outflow of irrational inclinations and aspirations with certain social interweavings and implications. The most astute remarks on this can be found in the Age of Enlightenment in Condillac. Often, he notes, a philosopher goes to war for the truth without knowing it and also without looking for it in things themselves; he therefore adopts a view that lets him hope to become the head of a school—fact remains, in any case, that the novelty of a system usually ensures its success.⁹⁹¹ The self-confident appearance of the philosopher reassures those around him, and even if some doubt gnaws at them, they remain silent for fear they might

⁹⁸⁹ *Op. cit.*, 428 f.

⁹⁹⁰ *Op. cit.*, 213–215.

⁹⁹¹ *Essai sur l'origine etc.*, Introduction = *Oeuvres*, I, 5 A.

not appear educated or intelligent enough.⁹⁹² The question now arises why precisely metaphysics contributes to satisfying the vanity of philosophers, so that it is cultivated with corresponding diligence. The reasons for this are easily found: the vagueness of metaphysics makes it invulnerable, so that the authority of its representatives rises, while at the same time its logical weaknesses permit it to become the crystallization point of passions that can seize and carry away many people. As Condillac writes, the abstract general principles of metaphysics do not allow for a logically compelling presentation of its positions. Vagueness facilitates their arbitrary selection and arrangement. Under these circumstances, passion remains as the only guideline of theoretical activity: it grants that inner conviction which drives the philosopher to design a system and demand its acceptance by others. Reason plays a minor role in all this; passion decides alone, and the form of the philosophical system is determined by the temperament of the philosopher. Precisely for this reason, metaphysical systems change constantly, being not even interpreted uniformly by their own adherents. How can one take such mutable systems, such offspring of strange moods, where the *Pro* can become *Contra* in a trice or vice versa, seriously at all?⁹⁹³ If philosophers inspire respect, says Condillac in a sentence often quoted since, it is only because of the importance of the questions they treat and not because of the manner in which they treat them. The more they obscure these questions, the more secure their reputation seems to be.⁹⁹⁴ Under the influence of this reputation, we read their works in reverence and inwardly ready to believe that acumen is lacking in us, not in them. And yet their systems are magnificent palaces built on sand.⁹⁹⁵ Voltaire wanted to say the same thing using different similes. Metaphysical systems, he wrote, are like balloons that give off only air when pricked; or they are passing ghosts, like the nightmares of the sick; or finally they are what novels are for a female audience: they come into fashion one after another, and in the end they all fall into oblivion.⁹⁹⁶

d) Metaphysics as Anthropological Constant

The replacement of the primacy of theology by the primacy of anthropology was, as already explained, a predominant and characteristic tendency of the modern era. The primacy of anthropology meant two interconnected things: the only interesting or accessible object of knowledge is man, and the remaining, i.e., extra- or superhuman objects must be seen in their relation to man, since they are knowable only to the extent that they participate in that relation, since they can be represented only in the human perspective of knowledge and through it. From

⁹⁹² *Traité des Systèmes*, I = *Oeuvres*, I, 122 A.

⁹⁹³ *Op. cit.*, II = *Oeuvres*, I, 126 B–127 A.

⁹⁹⁴ *Op. cit.*, IV = *Oeuvres*, I, 131 B.

⁹⁹⁵ *Op. cit.*, XII = *Oeuvres*, I, 206 AB.

⁹⁹⁶ *Courte Réponse aux longs discours...* = *Oeuvres*, XXIII, 194; cf. *Histoire de Jenni*, VIII = *Oeuvres*, XXI, 552.

the primacy of anthropology thus resulted the primacy of epistemology. But even earlier, i.e., already since the first period of the humanist movement, the primacy of anthropology had consciously and openly combined with the priority of practical-moral questioning over theological and ontological questioning. After the detachment from the metaphysical-speculative ideal in both its Platonic and Aristotelian as well as in its Christian (*contemplatio Dei* etc.) forms, not pure theory, but practice, specifically moral practice, is regarded as the highest human concern and destiny. But since the primacy of anthropology (also) meant a consideration of the problems of traditional metaphysics from a human perspective and by human standards, the mentioned placing-ahead of the practical-moral factor amounted to a new foundation of metaphysics, in which one no longer used speculative, but practical-moral argumentation; the practical-moral foundation of metaphysics thus constitutes a further step on the path that began with the humanist confession to the primacy of the *vita activa*.

In the concrete intellectual-historical situation of the Age of Enlightenment, this general tendency now assumes the special form of the subjection of God to the practical-moral postulates of the Enlighteners, who mostly do not want or dare a radical elimination of God and prefer instead to use him for their own purposes, playing him off against his traditional representatives and governors.⁹⁹⁷ God as the embodiment or advocate of Enlightenment morality had to be, however, a God assumed or proven and believed through (modernized) ethical argumentation. The subjection of metaphysics to ethics (as a special expression of the general subjection of theology to anthropology) is shown by the exclusive evaluation of the former based on new secular demands, specifically from the perspective of the demand for moral improvement or perfection of man. As we already mentioned, Hume and d'Alembert wanted to allow only ethical, not metaphysical arguments in the question of immortality,⁹⁹⁸ and there were also Enlighteners who explicitly demanded the reduction of metaphysics to ethics.⁹⁹⁹ The primary ethical demand now connects with factors that we can call "anthropological constants," not only because the Enlighteners generally consider moral conduct as the expression of the "true essence" of man, but primarily because of the close Enlightenment connection of moral-philosophical problems with the pair of concepts "pleasure-pain," central to the Enlightenment analysis of man. From this standpoint, it is assumed that metaphysics in its ecclesiastical-theological form, i.e., as the doctrine of a law-giving and at the same time rewarding or punishing God, is conditioned by the anthropological constants of pleasure and pain or hope and fear. Many Enlighteners thought the binding of anthropological constants to such metaphysics was a merely temporary state, as they started from the conviction that those

⁹⁹⁷ On this detailed Kondylis, *Aufklärung*, 361 ff.

⁹⁹⁸ See above note 108 and 130.

⁹⁹⁹ As e.g. the author of the entry *Critique*, see *Encyclopédie*, IV, 492 A.

constants could eventually be channeled in such a way that the realization of morality could be achieved exclusively by secular means, i.e., social rewards and punishments as causes of pleasure and pain or hope and fear. Those, on the other hand, who considered the binding of anthropological constants and practical-moral postulates to a (theological) metaphysics as essential and indissoluble can be divided into two groups: into relativists and nihilists, such as La Mettrie, who were of the opinion that evil and aggressive human nature could only be held in check by terrifying illusions with disciplining effect,¹⁰⁰⁰ and into moralists who for various reasons consider a divine sanctioning of morality and the moral world order in general as necessary. We will examine the thought of these latter more closely using the example of Kant, who does not seem to classify the content of traditional metaphysics (at least regarding God and immortality) as illusion, although he denies the possibility of a theoretical proof. An interesting aspect of the later intellectual-historical development lies in the reversal of the Kantian position, i.e., in its appropriation and modification by those who saw in metaphysics an individually and socially vital illusion or fiction. Without intending to, Kant posthumously worked into the hands of a tendency that from the beginning (cf. already Machiavelli's view on the social function of religion)¹⁰⁰¹ was interwoven with modern relativism and skepticism.

To judge the general physiognomy of Kant's work properly, specifically with regard to the central point of the relationship to metaphysics, we must first take leave of the widespread—and still believed—legends that were put into circulation by historians of philosophy and philosophers without particularly brilliant knowledge in the field of general intellectual history, such as that Kant introduced the "Copernican turn," i.e., the primacy of epistemology into philosophy, that he destroyed traditional metaphysics by demonstrating the limits of knowledge, that he established the primacy of practical reason, etc., etc. In reality, these views had already formed commonplaces of the Western European Enlightenment for decades, which Kant had to discover anew and more thoroughly because of the special conditions created by the long dominance of Wolffianism in Germany. The famous "Copernican turn" is nothing other than a renaming of the new epistemological meaning of the term "metaphysics," which Kant, as we know,¹⁰⁰² had adopted; anti-metaphysical agnosticism formed the almost obligatory attitude of every Enlightener after Locke; the placing-ahead of practical-moral criteria went back finally to the humanist defense of the primacy of the *vita activa*, and in the Age of Enlightenment it took the typical form of the request that people should concern themselves with what is useful to their life and leave everything else aside (in Germany this request received a religious-pietistic coloring, which also left its traces in Kant). From this fundamental view, Kant's work can be effortlessly regarded as a phase—albeit a late one—of that

¹⁰⁰⁰ Kondylis, *Aufklärung*, 508.

¹⁰⁰¹ *Op. cit.*, 180 f.

¹⁰⁰² See Chap. III, Sect. 3.

characteristic development of the modern era in which the primacy of anthropology cleared the old supremacy of theology out of the way. And the primacy of anthropology appears again in Kant in both interconnected forms it assumes in the modern era, i.e., as primacy of epistemology and simultaneously as primacy of the practical-ethical.

The distinctiveness (or originality, if one insists on this word) of Kantian philosophy must therefore be sought elsewhere. While Kant accepts the doctrine of the limits of human knowledge, which until then usually went hand in hand with empiricist epistemological presuppositions, he simultaneously asserts, in conscious contrast to Western European empiricism, the possibility of knowledge *a priori*¹⁰⁰³—which may be interpreted intellectual-historically as an effect of his Wolffian schooling; and while he affirms the primacy of epistemology on the one hand and of the practical on the other, he wants to derive from this the command for a restoration of central ideas of traditional, specifically theological metaphysics. But precisely because this restoration takes place by means of modern tools of thought, the price for it is the at least partial dependence of the mentioned ideas on the constitution of their conceptual supports, i.e., the two interconnected aspects of the modern primacy of anthropology. In other words: since the now primary epistemological work comes to the conclusion that the limits of theoretical reason are insurmountable, no other way remains for the justification of metaphysical ideas than the—likewise now primary—practical-ethical viewpoint. A double-sided constellation thus results: metaphysics in the new epistemological sense of the word places itself in the service of traditional metaphysics, but at the same time the content of the latter is purged and simplified (not least under the influence of Enlightenment deism), whereby it also mixes with anthropological quantities, since after the demonstration of the limits of knowledge by the new metaphysics, the restoration of the old relies on practical-moral arguments. By setting insurmountable limits to the possibilities of knowledge, Kant subsequently does not take the path of fideism, as was the case earlier with agnostics who did not want to end up in consistent skepticism, but he searches for a new profane-rational foundation of his metaphysics, although its content, despite all simplification, remains related to that of traditional metaphysics.

This doubleness explains why Kant regarded his epistemological work both as a refutation of a certain type of metaphysics and at the same time as a clarification of the ground for a new one. The new, epistemological meaning of metaphysics and the old meaning therefore encounter each other in his work not only as adversaries, but also—inasmuch as the former paves the way for the grounding of the latter (under the condition of its substantive renewal)—the shared name points to a positive relation between the two. It highlights at once two things: that metaphysics can, or ought to, be of service to religion, and that precisely in this function it is

¹⁰⁰³ See Chap. III, Sect. 4a.

critique of knowledge; without such critique, the unrestrained traditional speculative-metaphysical reason would harm both ("properly understood") religion and ("true") metaphysics.¹⁰⁰⁴ To be sure, Kant adds, critique of knowledge is only a means; the final and essential aim of metaphysics is the supersensible, that is, the main ideas of the metaphysical tradition.¹⁰⁰⁵ From this perspective one may say that Kant is a metaphysician in the traditional sense, and this claim can be reinforced by the observation that both the fundamental distinction between appearance and thing-in-itself, as well as the definition of space and time as forms of intuition, do not arise from an isolated analysis of human cognition, but are shaped on the basis of already established worldview-metaphysical decisions which, in terms of intellectual history, go back to the Platonic–Augustinian dualism.¹⁰⁰⁶ On the other hand, simply classifying Kant within the direct line of traditional metaphysical thinking solely on the basis of the criterion of strict separation between the sensible and the intelligible¹⁰⁰⁷ is hardly appropriate. It is true that Kant sees the content of metaphysics in certain traditional—and indeed theologically charged—ideas; yet it is equally true that these ideas are not adopted on the basis of the primacy of ontology and speculation, but on the basis of epistemology and practical postulates, which corresponds to characteristic tendencies of the modern age that came to the fore with particular intensity in the Enlightenment. Metaphysics can no longer be theory and speculation in the Aristotelian sense when theoretical reason cannot overstep the bounds of possible experience. And beyond these bounds, as already noted, stands not fideism, but rather the restoration of central ideas of traditional metaphysics—now understood from a profane perspective, that is, from the perspective of the primacy of anthropology in its double sense—and accordingly renewed.

According to the dominant Enlightenment view, any metaphysics (in the traditional sense) ought to become superfluous once the limits of knowledge have been demonstrated. Kant, who also here deviates from the prevailing Enlightenment opinion, does not regard metaphysics as dispensable despite the insufficiency of human reason, for he believes it is grounded in the constitution of human thinking, but also in human hopes and expectations. Yet although he parts ways with most Enlightenment thinkers on the question whether metaphysics constitutes a natural disposition of man or not, he agrees with them on the necessity of treating all philosophical problems on the basis of an analysis of the human mind's faculties. Metaphysics, in Kant's view, is also rooted in these faculties. Engagement with it is therefore not a matter of personal preference; metaphysics is not merely necessary but simply unavoidable. For although we cannot surpass the world of experience nor grasp the thing-in-itself, it is not within our

¹⁰⁰⁴ B, 878 f.

¹⁰⁰⁵ *Prolegomena*, § 40 = AA, IV, 327.

¹⁰⁰⁶ Heimsoeth, *Metaphysische Motive*, esp. 122 f., 136 f., 139, 145 f., 154 f.

¹⁰⁰⁷ So Wundt, *Kant als Metaphysiker*, esp. 426 ff., 428 ff., 161 ff., 216 f., 277 f., 291 f.

power simply to abolish the questions connected with this fact, since experience can never fully satisfy our reason. Who, for example, can refrain from posing the question of God and the soul after recognizing the inadequacy of materialist explanations and now seeking inner peace and satisfaction? Metaphysics is the favorite child of a natural predisposition of human reason; it does not arise from chance but from an "original seed, which is wisely organized for great ends," and it is therefore "perhaps more than any other science, laid in us by nature in its essential outlines"¹⁰⁰⁸. Since metaphysics is a natural predisposition, after every turning away from it we must nevertheless return to it as to a beloved who has become estranged.¹⁰⁰⁹ To give up metaphysical investigations is no more to be expected than giving up breathing for fear that we might inhale impure air. There will therefore always be metaphysics; each person will, however, "tailor it according to his own fashion," so long as no generally recognized standard exists. Since both traditional metaphysics cannot withstand examination and abstaining from metaphysics is impossible, we must take the critical path.¹⁰¹⁰ The critique concerns only the grounding of metaphysics and not its content in toto; for the ideas of pure reason cannot in themselves contain "deceptions and illusions"—they become such only through misuse.¹⁰¹¹

It must now be stressed that metaphysics as a natural predisposition of human reason is connected not only with the vision of complete and final knowledge, but just as much—or rather primarily, as we shall see—with the desire for personal redemption and blessedness, at least in the form of reward for moral conduct within the broader framework of a moral world-order guaranteed by God. This final anthropological root of the idea of God, and simultaneously of metaphysics, becomes visible in Kant's analysis of the concept of the highest good. To understand this analysis, however, we must begin from an important distinction. In his struggle against Western European empiricism and in his attempt to ground an a priori, thus empirically unconditioned, morality, Kant denies that his morality has anything to do with anthropological magnitudes and perspectives.¹⁰¹² Since we are here not concerned with the grounding of his morality but with the presuppositions of his metaphysics, we need not linger on this claim; we need not ask whether, or to what extent, Kant is theoretically able to derive the concept of moral duty from the structure of reason itself and simultaneously give it a concrete content such that it can command a specific action in each case. Kant's demonstration of the necessity of metaphysics likewise claims rational character for itself; it wishes to present itself as a postulate of pure practical reason. Yet if Kant can dispute the influence of motives tied to humanity's biopsychic constitution (such as the striving for happiness) on moral action, he

¹⁰⁰⁸ *Prolegomena*, § 57 = AA, IV, 351 f., 353.

¹⁰⁰⁹ B, 878.

¹⁰¹⁰ *Prolegomena*, Auflösung der allgemeinen Frage etc. = AA, IV, 367.

¹⁰¹¹ B, 697.

¹⁰¹² *Grundlegung zur Met. d. Sitten* = AA, IV, 389.

obviously can do so far less with respect to the expectation of reward for a virtuous life. This becomes evident from his treatment of the concept of the highest good in its relation to the question of God and thus also to the grounding of metaphysics. The moral law, which is the direct and exclusive motive of moral action, contains not the slightest indication of a necessary connection between morality and happiness as its reward. Morality does not teach us how to become happy, but only how to make ourselves worthy of happiness. Yet the highest good, as Kant defines it, does not exhaust itself in moral action; it consists in the harmony of morality and happiness—that is, in the enjoyment of happiness in accordance with the practiced morality—in short, in the reward of morality by happiness. Religion concerns itself exclusively with the hope of participation in happiness, and God is introduced precisely to guarantee the realization (not of morality, but) of the highest good—that is, the reward of virtue through happiness.¹⁰¹³ This means we arrive at the concept of God through pure practical reason, but on the condition that this reason grounds not only the moral law as the exclusive motive of moral conduct, but also the highest good, in which, besides pure morality, the reward of morality is included. The question of this reward would obviously never arise if man had no interest in happiness; but as Kant himself states, the striving for happiness is an anthropological constant,¹⁰¹⁴ and thus the appeal to God for the reward of morality remains tied to regard for an anthropological constant. What matters here, as we must repeat, is not that Kant emphasizes the independence of moral action from the hope of happiness, but that God is introduced in connection with the rewarding of virtue by happiness. If the moral agent were not a finite being and had therefore never posed the question of happiness to himself, then practical reason would restrict itself to formulating the moral law and would have no need to take the second component of the highest good (together with God and metaphysics) into account at all.

Kant himself had already clearly declared in his "pre-critical" period that philosophical thinking is bound together with the desire for salvation and blessedness—something that cannot remain without consequences for the systems inspired by such desires. The balance of thought, he wrote at the time, "is not entirely impartial," but even with "slight reasons" it inclines toward that arm of the scale inscribed "hope of the future"; this is its "only defect," which Kant admittedly can neither remove nor wishes to remove.¹⁰¹⁵ In later years he avoided stating the matter with equal openness and emphasis, but there can be no doubt that these words contain both one of his firm philosophical principles and his view of the inner relation between metaphysics and human hopes or desires. In view of this correspondence between basic desires and the respective philosophical or metaphysical system one constructs, it is no wonder that Kant—despite his effort to present human metaphysical inclination as an innate tendency

¹⁰¹³ *Kritik d. pr. Vernunft* = AA, V, 124 f., 140, 149 f.

¹⁰¹⁴ *Op. cit.*, 25: "To be happy is necessarily the wish of every rational but finite being..."

¹⁰¹⁵ *Träume eines Geistersehers*, I, 4 = AA, II, 349 f.

supported by as many arguments as possible—became the advocate of views that undermine precisely those conceptual distinctions he regarded as fundamental for the critique of knowledge and thus for the new and final grounding of metaphysics. Thus Kant undermines the fundamental distinction between constitutive and regulative principles when he claims that (practical) reason can apply the category of causality to a supersensible object such as God, in order thereby to prove God's reality.¹⁰¹⁶ Yet this is only one form of a central Kantian dilemma: if the ideas of practical reason, the cornerstone of metaphysics, are merely regulative, without their reality being provable, how can one then expect that they should be seriously believed? Certainly, Kant says, such belief must rely on practical-moral arguments; but if these truly hold, then God must also be real and not merely a regulative principle, for only a really existing God can guarantee the moral world-order. Rephrased: the assumption of a certain constitution of the ideas of practical reason must have implications for our views about the ontological structure of the world and thus for the limits of theoretical reason, which must expand in proportion as the reality of the ideas of practical reason is acknowledged. Kant indirectly—and unwillingly—admits this when, on the one hand, he says that reason entangles itself in paralogisms as soon as it oversteps experience, while, on the other hand, he considers it capable of refuting the "impudent" claims of materialism.¹⁰¹⁷ But if it is absolutely certain that materialism is false, why should the existence of immaterial substances not be absolutely certain? Kant suppresses these embarrassing questions, yet under their objective pressure he constantly vacillates in his statements about the reality of the ideas of practical reason: at times he regards them as useful for cognition, at other times as useless or even harmful, and often he leans toward assuming their real existence.¹⁰¹⁸ Just as one cannot demand belief in something whose existence is not secure, so likewise God cannot stand apart from morality and the moral world-order if these are indeed as man conceives them. It is characteristic that Kant rejects anthropomorphism when it comes to describing the divine essence, yet never does so when he seeks to ascribe certain moral attributes to God.¹⁰¹⁹

Kant's effort—even at the cost of logical gaps or leaps—to find the form of metaphysics most suited to social functionality is an unavoidable consequence of metaphysics being bound to certain anthropological constants, such as the desire for happiness, and to the practical-moral aspect of the primacy of anthropology. The criterion of social functionality is not thematized by

¹⁰¹⁶ See the analysis by Oesterreich, *Kant und die Metaphysik*, esp. 121 f.

¹⁰¹⁷ *Prolegomena*, § 60 = AA, IV, 363.

¹⁰¹⁸ Oesterreich, *Kant und die Metaphysik*, 96 ff., 124 f. (with documentation). Even Vaihinger, who considers the view that the ideas of practical reason are merely *entia rationis* to be genuinely Kantian, simultaneously admits that Kant's thoughts on this question were not coherent, since Kant grants reason the right to assume the reality of those ideas, and sometimes even regards the assumption of this reality as a duty of reason (*Kant – ein Metaphysiker?*, 148).

¹⁰¹⁹ Oesterreich, *Kant und die Metaphysik*, 104 ff., 109, 113.

Kant, for with the pride of the philosophical thinker he wishes to derive everything from pure practical reason; yet this criterion drives him back into the arms of (traditional) religion, whose historical relation to morality was well known to him. Already in the childhood of philosophy, he wrote, human beings began precisely where we would now like to end: they concerned themselves with the knowledge of God and with the hope or even the constitution of another world. Their religious ideas were initially crude, but the more enlightened among them examined these ideas more closely and came to the conclusion that the best way to please God and partake in blessedness is the good life. Theology and morality were thus the two driving forces or reference points of rational inquiry, even though metaphysics later restricted itself to speculation and theology.¹⁰²⁰ By attempting to ground metaphysics anew upon morality and thereby to employ central theological ideas for practical-moral purposes, Kant gives the impression of seeking a return of metaphysics to its source—whose legitimacy he does not dispute—and of ending the long interregnum of speculative or ontologically oriented metaphysics. This return is now to proceed by critical means, that is, through a multidimensional philosophical construction, whereas in the initial forms of the interweaving of theology and morality the theoretical-philosophical component was underdeveloped. This considerable difference in theoretical level shows—at least *ex contrario*—how irrelevant the philosophical grounding actually is, and how decisive the aspect of anthropological constants and social functionality is: an aspect operative just as strongly in the uncritical beginnings of metaphysics as in the time of its final, "critical" grounding after Kant.

The fact that Kant himself sometimes violated his own fundamental conceptual distinctions in order to secure the objective reality (and not merely validity) of the ideas of practical reason shows, beyond any doubt, how little he intended to regard metaphysics merely as a socially and morally useful illusion rooted in certain constant needs of human nature (such as the hope for happiness). On the other hand, Kant grounded metaphysics anthropologically; that is, he pushed aside its ontological dimension and connected it with the human mind and heart. In doing so, he left open in many respects the possibility of identifying metaphysics with illusion—that is, with something that lacks existence outside the realm of human representations. Nevertheless, it would be historically false to assume that the conception of metaphysics as an anthropologically conditioned illusion arose directly from a specific interpretation of Kant's position. Rather the opposite was the case: in the second half of the 19th century—when positivism was still very strong, and American and European pragmatism as well as the Marxian doctrine of ideology as false but socially functional consciousness were just emerging—certain Neo-Kantians, for whom Kant was primarily or exclusively an epistemologist, interpreted his conception of metaphysics pragmatically: metaphysics is thus a

¹⁰²⁰ B, 880 f.

fictive but useful construction (just as many auxiliary hypotheses or conventions in mathematics and the natural sciences are fictive yet useful), and therefore we ought to behave "as if"—so Kant repeatedly expresses himself—it were objectively true. The influence of such reinterpretations of originally Kantian ideas on prominent critics of metaphysics in the 19th century—not least Nietzsche—will occupy us in the next chapter.

IV. The Course of the Critique of Metaphysics in the 19th and 20th Centuries

1. Outlook

As already noted in the introduction, the substantive originality of thought critical of metaphysics in the 19th and 20th centuries has been overestimated in many respects, creating the impression that radical and systematic critique of metaphysics—after Kant's ambivalent undertaking—only truly set in during this period. The reason for this lay primarily in the fact that certain creative and particularly self-confident generations or individuals successfully represented their claim to be striking out on new paths and acting in an epoch-making manner. This claim could not be verified against a satisfactory history of the critique of metaphysics, and furthermore, the long intellectual-historical continuity of basic motifs of the critique of metaphysics was difficult to identify because the various types of critique coexisted in different authors with varying dosage, mixture, accentuation, and justification, without their specific prehistory being consciously realized. Here, however, we do not intend to recount individual achievements in the critique of metaphysics rhapsodically, but to view them in their totality and reconstruct them with systematic intent; only in this way do we gain the perspective within which the intellectual-historical continuity of the thought structures can be made vivid and understandable. Seen in this way, the similarities between the basic types of metaphysics critique in the 19th and 20th centuries and those of the early modern period go so far that the structure of this chapter had to turn out almost identical to that of the preceding one. Whether the greater clarity thus achieved compensates sufficiently for the feeling of a certain monotony is for the reader to judge.

The "optical illusion" that the critique of metaphysics in the 19th and 20th centuries was historically groundbreaking in its entirety rests on a confusion of the content-structural with the atmospheric or even with the quantitative. Undoubtedly, (radical) ideas critical of metaphysics spread in the 19th and 20th centuries as never before. The force, in turn, with which the critique of metaphysics was exercised particularly after 1850, was directed primarily against attempts at an ideological restoration with the aid of religiously stamped, if not apologetic, metaphysics. Sociologically, it can be explained *grosso modo* by the rise of the industrial bourgeoisie, which went hand in hand with a downright rapid development of natural science and technology. At the same time, a laicistically minded educated bourgeoisie grows and thrives, adhering fundamentally to the dominant ideology of progress, while simultaneously groups of intellectually and politically much more radical intellectuals become increasingly vocal, affirming the development of science and technology in a different perspective and intent than the bourgeoisie, by linking the disenchantment and domination of nature with revolutionary-emancipatory demands. Their diagnoses and prognoses—but also those of a large part of the laicist and progress-believing bourgeoisie—were expressed by Bruno Bauer when he opined that metaphysics had been destroyed forever by criticism and that no metaphysical

system would be able to maintain a place in the history of culture in the future.¹⁰²¹ Regardless of how accurate one considers this lapidary statement, it must be admitted that the anti-metaphysical attitude prevailing since the middle of the 19th century, despite occasional fluctuations which also characterize the last decades of the 20th century, was by and large the progressive one, i.e., the one that conceived of metaphysics as an obstacle in the path of scientific and social progress and consequently wished to eliminate it.¹⁰²²

The decisive event in the intellectual history of the 19th and 20th centuries was the development of the natural and human sciences (*Geisteswissenschaften*), whereby in particular the breathtaking progress of industry and technology made the significance of the former palpable even into the daily life of the broad masses. Now, the rise of modern natural science had already characterized the intellectual physiognomy, if not yet the everyday life, of the 17th century, and to such an extent that a restructuring of philosophy in general and of metaphysics in particular became inevitable. Thus, the time of traditional metaphysics was finally over; metaphysical thought, however, remained vital enough, at least for some time, to attempt new syntheses with the help of a modernized conceptual instrumentarium, which took into account the great turn in the scientific realm in one way or another. In the 19th and 20th centuries, too—even after Hegel's stillborn philosophy of nature—many a short-lived and fragmentary effort was undertaken to grapple with the results of the natural sciences from a metaphysical perspective and to capture them, for better or worse, within the framework of metaphysical systems or even to base such systems upon them. The approximation of natural science and metaphysics to one another was, however, mostly attempted by opponents of traditional metaphysics who made use of the epistemological and gnoseological reinterpretation of the concept of metaphysics known since Bacon and made common by the Enlightenment, while metaphysical designs of purer water arose rather as a protesting gesture against the progress of the natural sciences and the associated enforcement of the allegedly shallow positivistic-scientistic mode of thought. In doing so, recourse was sometimes made to substantive and methodological insights of the historically proceeding human sciences—a recourse that was out of the question in the 17th century—yet precisely the reliance on historical or anthropological ideas revealed the inner insecurity of the new metaphysical approaches; for not only is their confession to transcendence ambiguous, as we shall see in the next section, but this transcendence is also thematized primarily in its relation to man, while remaining unclear in ontological respects or being

¹⁰²¹ *Rußland und das Germanentum*, 47 ff.

¹⁰²² I refer here to Collingwood's (*Essay*, 82 f.) tripartite division of anti-metaphysical attitudes into a *progressive*, a *reactionary* (when Conservatives dismiss revolutionary plans for the restructuring of society as daydreams and abstract metaphysics, cf. above Chap. III, Note 150) and an *irrationalist* one (when metaphysics is classified as a component or product of a rationalistic-scientific culture, which is to be replaced by another one based on feelings etc.). It should be noted that the progressive and the irrationalist attitude could to some extent combine in some philosophers of life or existence.

described in a substantively non-binding and circuitous manner by means of direct or paraphrased citations from the (older) philosophical tradition.

In the 19th and 20th centuries, the metaphysical need of man and the necessity of a metaphysics in the sense of a theory of transcendence or of Being were asserted repeatedly; the theoretical achievements associated with this remained, however, rather meager—and precisely this discrepancy between metaphysical demand and metaphysical performance is characteristic of the period treated here. Anyone who is inclined by disposition to confuse the intensity of the demand with the quality of the performance will, of course, be allowed to express himself much more positively about the creativity of metaphysicians in the last 150 years than an observer of the philosophical scene who does not do so.¹⁰²³ The tradition of metaphysical thought lives on today mainly in the hothouse of the history of philosophy; the writing of works on the history of philosophy, however, constitutes less a sign of the spread of the philosophical or even metaphysical need and more a consequence of the prosaic fact that the number of those publishing in these subjects has risen considerably for institutional and professional reasons. A noteworthy metaphysical "wave" arose only after the First World War; in this case too, however, the envisioned goals were rather negative (combating relativistic historicism, scientism, and the reduction of philosophy to epistemology and methodology), and behind the demand for the resurrection of metaphysics often stood religious interests.¹⁰²⁴ The fierce response of positivism to this wave was not long in coming anyway, so that after the Second World War the great longing for metaphysics failed to materialize and victorious late liberalism could ideologically identify with scientistic and positivistic, in any case decidedly anti-metaphysical, tendencies. Even today, where positivism has long since passed its zenith, "metaphysical" approaches draw their strength and good reputation largely from epistemological considerations, while attempts to revive the "myth" thrive in a by no means mythical, i.e., in a soberly skeptical and relativistic climate that permits or even encourages every kind of fool's license because the technical-rational attitude supporting social life stands beyond practically relevant doubt and danger. The theoretical and social weakness of metaphysics in the last 150 years is shown,

¹⁰²³ In any case, such an observer would refrain from taking this kind of intellectual work for a noteworthy renewal of metaphysics—unlike, for example, the translation of Thomism into a partly secularized language with cautious opening toward more modern questions (so e.g. Maritain, *Preface to Metaphysics*), or the rejection of the relativistic consequences of anthropocentric historicism and of the historicist view of knowledge, under self-righteous appeal to the firm principles of Thomistic doctrine of being (so e.g. Fackenheim, *Metaphysics and Historicity*, or O. Martin, *Metaphysics and Ideology*); the genesis and effect of such intellectual work, moreover, owe much to the institutionally secured backing of the Church.

¹⁰²⁴ In more or less typical form, all these motives appear in Wust's otherwise not very fruitful, yet at the time widely read book on the "resurrection of metaphysics." In Geyser (*Einige Hauptprobleme der Metaphysik*) one sees how Catholics wanted to exploit the metaphysical wave of the 1920s for a refutation of (Kantian and Neo-Kantian) agnosticism.

however, above all in its silence on the question of value. Traditional metaphysics lived precisely on the establishment of a close connection between the question of Being and the question of value, or on the derivation of practically binding values from a certain view of the nature of Being or Transcendence. Since its collapse, no one who posed as a metaphysician has systematically dared to tackle such a task; the (non-religious) grounding of ethics has long taken place on an immanent basis, and today's attempts to establish a value-laden metaphysics appear rather amateurish and comical.¹⁰²⁵

In contrast to a timid and vague metaphysics, the critique of metaphysics was able to unfold almost without inhibition within a largely secularized society; yet in terms of content, it remained within that framework which had been marked out early on by the general approach of modern rationalism. We know what role the replacement of the primacy of the *certitudo objecti* by the precedence of the *certitudo modi procedendi* as well as the principle *verum factum convertuntur* played in the dissolution process of traditional metaphysics.¹⁰²⁶ Regardless of the intellectual-historical knowledge of the critics of metaphysics in the 19th and 20th centuries, it was therefore no coincidence, but lay in the inner logic of their worldview position, that they treated the question of method preferentially in one way or another, by criticizing the (deductive-intellectualist) procedure of traditional metaphysics, or by basing new definitions of metaphysics on methodological considerations that were intertwined with the theory and practice of the sciences (inductive construction of a theoretical whole, interaction of hypotheses and experience, use of logical and mathematical means, etc.). In close connection with this prioritization of the question of method, a new variation of the principle *verum factum convertuntur* appeared, which resulted from the modern epistemological and gnoseological problematic. This time, namely, it was not a matter, as with the humanists or the representatives of early modern natural science, of the question of who the actual author of the object to be recognized is and whether author and knowing subject coincide or not, but rather of the extent to which the knower, by constituting the object of knowledge through his cognitive activity, regardless of its ontological nature and origin, must in any case be regarded as its sole relevant author. Since for us no other nature of the object can come into consideration than that which is mediated by our (mode of) cognition, the knowledge of the object amounts to its shaping or creation by the knower, whereby the metaphysical question of the objective nature of the Being and at the same time that of the "objectivity" or "fictitiousness" of knowledge are excluded *a limine*: Knowledge is always fiction or convention; the methodically constructed convention, unassailable by any methodical or empirical means, is, however, at the same time the only

¹⁰²⁵ See, for example, Rescher, *Evaluative Metaphysics*, esp. 71.

¹⁰²⁶ See above, chap. I, 2b; II, 1a, 4; III, 3.

accessible object of knowledge itself, or rather the point at which author and object of knowledge become one. The principle *verum factum convertuntur* thus transforms into modern conventionalism, which explicitly or implicitly accompanies the newer pragmatist and positivist anti-metaphysical positions—and not only these.

As in the older critique of metaphysics, so too in the newer, the prioritization of the question of method and the strong conventionalist trait went hand in hand, for obvious reasons, with the rejection of the traditional doctrine of substance based on an objectivist view of knowledge. The continuity of the leitmotifs is striking, incidentally, when one reads, for instance, Mill's critique of the system of Aristotelian categories¹⁰²⁷ or Herbart's reservations against the Aristotelian concept of substance.¹⁰²⁸ One could also refer to Hume if one wanted to replace the substance with the concept of the thing as something "changeable, whose changing states are brought into connection with one another by our thinking".¹⁰²⁹ The concept of substance could therefore only have a hypothetical character, be an interpretative aid¹⁰³⁰ or a psychologically necessary auxiliary construction without objective existence in tested experience¹⁰³¹ — "completely useless if one wants to explain".¹⁰³² As Wundt's sentence cited above already indicates, usually among the newer critics of metaphysics this critique was followed by the express wish to dissolve the formerly solid substantial core into a mobile ensemble of relations or functions forming ever anew. When James—in words reminiscent of Nizolio or Fracastoro—called the ontological hypostatization of properties an empty abstraction, he added that although from the perspective of a certain philosophical interest we place the identical, which is usually regarded as substance, in the foreground, from another perspective we could consider the identical as secondary and the differentiating as primary.¹⁰³³ Entities are thus not defined once and for all on the basis of the knowledge of the substance, but can be virtually formed by subjectively conditioned combination of varying elements or properties. Whitehead says it bluntly: the actual entity is not a substance with fixed qualities that remains the same in all changes of accidents, but the outcome of what is ascribed to it as quality or relation.¹⁰³⁴ This second—after the Enlightenment—dissolution of the substance ends with the view that the so-called substance represents only the sum of brief events which combine with one another in a certain way; the existence of (material) substance in the core of things is nothing more than an abstract

¹⁰²⁷ *System of Logic*, I, 3, § 2 = CW, VII, 46 ff.

¹⁰²⁸ *Allgemeine Metaphysik*, § 195 = SW, VIII, 49.

¹⁰²⁹ Wundt, *Logik*, I, 524 f.

¹⁰³⁰ *Op. cit.*, 527, 532.

¹⁰³¹ Avenarius, *Philosophie*, 61, 57.

¹⁰³² Nietzsche, *Wille zur Macht*, § 523 = p. 358.

¹⁰³³ *The Sentiment of Rationality* = Works, V, 51.

¹⁰³⁴ On the relational character of the "actual entity" and its consequences for Whitehead's general conception of reality see Böhme, *Whiteheads Abkehr*, esp. 45 f., 51 f.

possibility, especially since the mentioned events would evoke exactly the same perceptions.¹⁰³⁵ This means: the adequate knowledge of functions can thoroughly make up for potential uncertainties about the nature of substances. Functional observation prevails all along the line, and the early Wittgenstein can thus reformulate a central anti-metaphysical argument since Galileo's times to the effect that a proposition can only say *how* a thing is, not *what* it is.¹⁰³⁶

The inner dissolution of the substance accompanied since the early modern period the collapse of the hierarchy of substances, i.e., the unification and homogenization of the universe. The great commonality between the various monisms of the past and the atomization of the world in the 19th and 20th centuries consists in the fact that in both cases homogenization and unification took place to the same extent. Thus, within the universe, no support remained for the old separation between This-side and Beyond, Immanence and Transcendence. This tendency now reaches its peak in the abolition of the last remaining gap, namely the gap between thing-in-itself and appearance. Keeping thing-in-itself and appearance apart had rendered good services to the polemical agnosticism and phenomenalism of earlier critics of metaphysics; nevertheless, it could also be interpreted in favor of metaphysical positions, and furthermore it became superfluous or even a hindrance to the extent that agnosticism lost much of its polemical importance with progressing secularization.¹⁰³⁷ In logical terms, in turn, the dissolution of the substance had to abolish the opposition between appearance and thing-in-itself; as Mach remarked, the unknowability of the thing is over when it is conceived as a connection of elements.¹⁰³⁸ The flip side of the same approach is the rejection of the common identification of appearance and semblance (*Schein*), which suggests that appearance is ontologically inferior and that the true world hides behind it.¹⁰³⁹ Establishing the far-reaching significance that was attached to the opposition between solid reality and changeable appearance in traditional metaphysical thought¹⁰⁴⁰ necessarily spurred the polemic against it; in doing so, several arguments were adduced to demonstrate its untenability, which we need not

¹⁰³⁵ Russell, *Analysis*, 244. Cf. in the older literature Lotze's definition of the being of things as "standing in reciprocal relation" (*Grundzüge*, § 8, cf. §§ 12, 14, 16) or as "realities of relations" (*System*, II, 33, cf. 34: absence of relation means non-being), as well as Dieterich's conception of the essence of the thing as its "inner law of development" (*Grundzüge*, § 4).

¹⁰³⁶ *Tractatus*, 3.221; that the terms "Substance" and "Thing" used in this work by no means retain their traditional meaning has been shown by Stenius (*Wittgenstein's Tractatus*, 60 ff.).

¹⁰³⁷ See below, 4a (aa).

¹⁰³⁸ *Erkenntnis*, 10 f.

¹⁰³⁹ See, for example, Wundt, *Metaphysik*, 130 f.; Dewey, "Appearing and Appearance" (1927) = LW, III, 55 ff.; Heymans, *Einführung*, 16 ff.

¹⁰⁴⁰ See, for example, Schlick, *Probleme*, 87.

recount here.¹⁰⁴¹ They have, at any rate against the background of the increasing general distancing from the traditional conception of transcendence and substance, had such a direct and indirect effectiveness that even those who wanted to infer the transphenomenality of Being from the phenomenon of Being felt compelled to explain simultaneously that this Being does not hide as a separate essence behind the phenomena; it is merely meant that the Being of the phenomenon withdraws from the phenomenal state, although it is coextensive with the phenomenon.¹⁰⁴²

Recalling these basic motifs of the critique of metaphysics in the 19th and 20th centuries makes clear that the latter took up and continued much older lines of thought, whereby, at least in its consistent forms, it realized in thought with almost ideal-typical clarity what was implicit in the earlier development: a homogeneous and uniform world without substances and hierarchies of substances and also without any separation between essence and appearance—a world, that is, which consists of arbitrarily combinable and mutually exchangeable elements whose relations to one another are grasped and represented less according to ontological and more according to conventional viewpoints. Quantitative observation, whose features and consequences were already emerging in the 16th and 17th centuries, thus prevailed completely against the qualitative. This endpoint was reached by employing against metaphysics anew, albeit in varying forms and intensities, the already proven weapons, i.e., agnosticism, the rejection of intellectualism, language critique, as well as sociological and psychological or anthropological insights. In doing so, the critique of metaphysics in the 19th and 20th centuries, just as in the 17th, also had an indirect effect: not only did it destroy certain forms of metaphysics, but at the same time it negatively influenced the character of the continuing metaphysical thought. We want to begin the analyses of this chapter with this intellectual-historically important question.

¹⁰⁴¹ The most important of these arguments are found in Schlick, *Aufsätze*, 8 f.; Ayer, *Language*, 130, as well as *Metaphysics*, 65 f.; Lazerowitz, *Structure*, 199 ff., esp. 209; Lamprecht, *Metaphysics*, 398.

¹⁰⁴² Sartre, *L'Être et le Néant*, 16.

2. The Consequences of the Unification of the Worldview and of the Primacy of Anthropology for Metaphysics after the Enlightenment

Through the Enlightenment, two essential positions of modern rationalism finally gained the upper hand, which also were not without influence on the content of metaphysics in the 19th and 20th centuries. The unification of the worldview, as undertaken by the mechanistic natural science of the 17th century, did eliminate the separations between the spheres of the cosmos, but let the separation between God and World stand; only in the Age of Enlightenment and in the succession of consistent Spinozistic monism did philosophemes arise which aimed at the abolition of every transcendence. Likewise through the Enlightenment, the other great worldview postulate of the modern age, namely the primacy of anthropology, was intellectually-historically secured, specifically on the one hand by the prioritization of epistemology and ethics in the realm of philosophical disciplines, on the other hand by the development of the historical and anthropological sciences. This double development gradually gained entry into metaphysics, albeit with delays and via detours, and this formed in itself an eloquent indication that Enlightenment and Revolution had created accomplished facts that neither friend nor foe could ignore. From now on, all significant secular metaphysicians take leave *nolentes volentes* of the traditional view on the relation between transcendence and immanence, and not only do they knit closer ties between the two, but they also more or less deprive transcendence of its time-honored normative stamp and function. The Transcendent ceases to represent the embodiment of the normative or the highest normative instance, and instead becomes the primal source (*Urquelle*), which brings forth all shapes of the finite, the bad and ugly no less than the good and beautiful, from itself. The closer circumstances of this production or the relationships between Finite and Absolute, Being (*Seiendem*) and Being (*Sein*), etc. remain, of course, just as unclear as they were in analogous thought constructs of the past; the main thing, however, lay in the fact that it was now all over not only with the thought of creation, but also with the old hierarchy of ontological levels and with transcendence of the old style in general. Conservatives, who at the time of the Restoration promised themselves a strengthening of religion from the revival of metaphysics, admittedly placed the object of metaphysics in the principles "that lie above nature",¹⁰⁴³ or drew a sharp dividing line between the religion-promoting speculative metaphysics (of German Idealism) and that "so-called" metaphysics (of Western European empiricism), which actually only poses the question of the possibility of a metaphysics.¹⁰⁴⁴ These conservative hopes were not, or not fully, fulfilled, especially since after 1848 the interpretation or creation of metaphysical systems was taken over by the laicist bourgeoisie or by aestheticizing intellectuals who wanted to connect metaphysics either with science or with non-religious mythologies. Symptomatic of the partly willed, partly

¹⁰⁴³ See e.g. Schlegel, *Fragmente...* (1827) = *Werke*, XXII, 389.

¹⁰⁴⁴ Thus Carlyle, *Characteristics* (1831) = *Works*, XXVIII, 40 f.

unwilled transformation of metaphysics under the pressure of accomplished (intellectual-)historical facts is, for example, the renunciation of the concept of substance by prominent representatives of philosophical metaphysics.¹⁰⁴⁵ Bergson, who joined this renunciation, took a step further and reversed the traditional understanding of metaphysics. Anticipating Heidegger, he threw traditional metaphysics and modern science into one pot, since both allegedly believed in a fixed reality given from eternity and rationally graspable; a modern conception of metaphysics, however, should orient itself by the idea of duration, i.e., that of a becoming hardly classifiable into rational scientific or metaphysical categories.¹⁰⁴⁶

The monistic tendencies of German Idealism significantly influenced this turn of secular metaphysics in the two centuries after the Enlightenment. They stem, incidentally, themselves from Enlightenment thought, specifically from the peculiar mixture of the freely interpreted philosophemes of Spinoza, Leibniz, and Shaftesbury in the late phase of the German Enlightenment.¹⁰⁴⁷ On this intellectual-historical basis, Hölderlin was the first to draft a consistent philosophy of unification (*Vereinigungsphilosophie*), which was received and expanded by Schelling and Hegel.¹⁰⁴⁸ The specific and pathbreaking aspect of this philosophy of unification lay, however, in the connection of the monistic approach with the epistemological problematic, with which one had to grapple as a philosopher in Germany after Kant and Fichte. The question of how this connection is to be conceived separates the paths of Schelling and Hegel after the time of their Jena collaboration. Schelling holds fast to the Hölderlinian concept and contests the knowability of the Absolute by thought, although he admits that in the state of finiteness no other perspective than that of thought can come into question; the paradoxical task of constructing an adequate system of the Absolute under these circumstances leads him to solutions which are reflected during his late period in the juxtaposition, but also mutual supplementation, of negative and positive philosophy. While Schelling, despite the legends of his Protean transformations, remains faithful to the same fundamental position throughout his life despite all shifts in accent, Hegel's development experiences a radical break through his confession to the knowability of the Absolute. Under Fichte's influence, Hegel adopts the view of the identity of Being and Knowledge, which takes the form of an identity of Substance and Subject in him. Thus consciousness and world-ground, man and God prove to be ontologically identical structures, which run through the same development within the framework of the movement of the Concept and are simultaneously grasped in thought by this same movement.

¹⁰⁴⁵ See e.g. Schopenhauer, *Die Welt als Wille*, I, Appendix = SW, II, 543 f., 581 ff. Cf. the manner in which Bradley dissolves substances of traditional metaphysics, e.g. the soul, in the indivisibility of the Absolute, *Appearance*, 295 ff.

¹⁰⁴⁶ *Evolution*, 372 ff.; cf. Wahl, *Traité*, 33 ff., 52 ff.

¹⁰⁴⁷ On this Kondylis, *Aufklärung*, 576 ff.

¹⁰⁴⁸ On this Kondylis, *Entstehung*, Chap. II and III.

Two consequences result from this: the new ontology can be defined as Logic, and that stage of Logic at which the substance is completely subjectivized, i.e., every separation between substance and subject is overcome, must now be called subjective logic. The lower stage of Logic, at which the gap between substance and subject remains more or less in existence in its various forms—also in the form of the opposition of transcendence and immanence—deals with the content of traditional metaphysics, which rests on abstract determinations of the understanding, i.e., assumes fixed identities of things, attributes the relevant finite thought determinations to the Absolute as predicates, and finally views the question of the true and the false in the perspective of empty isolations.¹⁰⁴⁹ Enlightenment empiricism, Kantian criticism, and the intuitionist doctrine of immediate knowledge have taken metaphysics under fire for different reasons, but they have fallen into the same fundamental error as their opponent: they have absolutized a certain, each time different side of finiteness and thus built up mere identities of the understanding.¹⁰⁵⁰ Seen in this way, metaphysical thought comprises not only traditional metaphysics, but every form of thought in which abstract, finite, and fixed thought determinations predominate, whereby the counter-concept to metaphysics conceived so broadly is called "Dialectic".¹⁰⁵¹

The overcoming of formal logic by a dialectical one thus enables the overcoming of traditional metaphysics.¹⁰⁵² This appears theoretically feasible, in turn, because dialectical logic is a subjective one: only the absorption of substance into the subject eliminates every separation, every abstraction, and thereby also every transcendence. There is thus a substantial connection in Hegel between the abolition of metaphysics and the identity of Being and Thinking,¹⁰⁵³ which is also shown by the fact that the *adaequatio rei et intellectus* recedes before a spilling over of the Concept onto Reality.¹⁰⁵⁴ It is not "Life" or the "Concrete" that opposes metaphysical abstraction or fiction here, as happens with philosophers of life, etc., but the concrete grasping of things by the Concept is intended to overcome or sublimate the metaphysical knowledge of them by the mere understanding.¹⁰⁵⁵ The consequences for traditional metaphysical transcendence are, however, no less devastating. For it is not only the case that the substance dissolves into relations through its subjectivization, but also the idea that God is a mere Beyond belongs precisely only to the mere understanding-statements of metaphysics, which in its inability to

¹⁰⁴⁹ *Enzyklopädie*, §§ 28 ff. Cf. Theunissen, *Hegels Logik*, esp. 263 f., 265.

¹⁰⁵⁰ *Op. cit.*, §§ 38 Add., 48 Add., 74. Hegel uses here the same thought schema that he had already used in the treatise "Faith and Knowledge" following Schelling to classify the contemporary main forms of German philosophy as philosophies of finitude, see Kondylis, *Entstehung*, 660 ff.

¹⁰⁵¹ *Enzyklopädie*, § 81.

¹⁰⁵² Cf. Seidel, *Hegels Kritik*, esp. 464 f.

¹⁰⁵³ Cf. Schulz, *Hegel und das Problem*, esp. 68 f., 82 f., 86 f.

¹⁰⁵⁴ See the good analysis by Theunissen, *Begriff und Realität*, esp. 165 f., 193.

¹⁰⁵⁵ Houlgate, *Hegel*, 99.

come to concrete identity could not grasp that the finite possesses no truth in its difference from the Absolute and therefore not only let the finite be finite, but also made God into a finite being.¹⁰⁵⁶ If we now disregard the knowledge and consciousness problematic that finally separated the paths of Schelling and Hegel, we must determine that also in the late philosophy of the former, against the background of the original and still effective monistic approach, God and World by no means fall apart in the sense of the old transcendence. Their intertwining is admittedly grounded quite differently than in the late Hegel, yet common remains the view that conventional metaphysics has nothing reasonable to say anymore on this central question. Schelling had already early on criticized the metaphysical opposition of reason and experience and emphasized the necessity of Kantian metaphysics critique,¹⁰⁵⁷ just as in his late work he rejected the formalism of the metaphysicians who presupposed their objects and occupied themselves only with predicates;¹⁰⁵⁸ to this bad metaphysics he always opposed a "true" or "right" one.¹⁰⁵⁹ A main task of the same consisted precisely in explaining the "process of the generation of divine Being" or the "theogonic process"¹⁰⁶⁰ — and specifically mindful of the "greatest thing" in Christianity, i.e., the condescension of God, who accordingly could not be a "metaphysically screwed-up God".¹⁰⁶¹ Schelling affirms the principle of pantheism in principle, but against its strict determinism he wants to ground and secure the freedom of divine willing.¹⁰⁶² He does this in a very ambiguous way, namely by ontologically lowering God by letting his freedom arise and act only against the background of a more primordial and more extensive ontic principle. Not coincidentally, he therefore sets himself apart from the common theological interpretation of monotheism, which he allows to be valid only against pagan polytheism.¹⁰⁶³

His own version of monotheism states that the Being (*Seiende*) could produce only a single God, and precisely because it brought forth God not through a part of its potentialities, but in its capacity as a single and all-encompassing totality. The Being is there before God as his "matter" or "foundation," and the possibility of willing lying within it must be actualized as free willing so that God can step onto the scene as determinate Being or as Creator alongside diverse Being. Although God is not simply identical with the originally Being (*ursprünglich Seienden*), but becomes Being that can lift itself freely against every other Being only through the actualization of the potential willing of this Being, he nevertheless owes his uniqueness to his origin from the

¹⁰⁵⁶ *Enzyklopädie*, §§ 36 Add., 83 Add.

¹⁰⁵⁷ *Allgemeine Übersicht...*, SW, I, 464; *Ideen...*, SW, II, 8 f.

¹⁰⁵⁸ *Philosophie der Offenbarung*, I = SW, XIII, 34 ff., esp. 41 f.; cf. *Phil. der Mythologie*, I = SW, XI, 261 ff.

¹⁰⁵⁹ *System der gesamten Phil.*, SW, VI, 214; *Phil. der Offenbarung*, I = SW, XIII, 6.

¹⁰⁶⁰ *Phil. der Mythologie*, I = SW, XI, 91.

¹⁰⁶¹ *Stuttgarter Privatvorlesungen*, SW, VII, 429.

¹⁰⁶² *Phil. der Mythologie*, II = SW, XII, 35 f., 39 f.

¹⁰⁶³ *Op. cit.*, 20, 28.

Being. God is indeed the (actualized) Being (*Seiende*), and precisely its "absolute unity" prevents there being more than one God; the uniqueness of God comes not from his divinity, but from the foundation of the same.¹⁰⁶⁴ Therefore, the setting-off of God against other Being cannot be conceived in the sense of the traditional opposition of God and World, Transcendence and Immanence, since now both members of the old alternative are grounded together in the Being (*Seienden*) or in the "unprethinkable Being" (*unvordenklichen Sein*), which shapes their relations to one another accordingly. Under the mentioned conditions, namely, only he can be called the only God who is the All-One according to his concept, i.e., the All-One because he excludes nothing, and the All-One because he can be only as the indissoluble unity of all forms and shapes of Being; therefore he is not merely Spirit, but he is equally the other Potencies.¹⁰⁶⁵ Real in the Potencies is only the Divine; only God exists also in the mutually exclusive Potencies; only he remains One in the plurality of his forms or Potencies, although he is another in each of these.¹⁰⁶⁶ The "tensed" or "mediated by resistance" Being of God does not sublate the "tensionless," but through the tension and the opposition of the Potencies themselves the divine Being is restored, and God now possesses in mediated form what he originally possessed unmediatedly.¹⁰⁶⁷ How these thought figures can be reconciled with the Christian thought of creation remains unclear. Schelling assures, indeed, that the world is not an emanation of the divine nature, but a free creation of the divine will,¹⁰⁶⁸ yet this assurance evidently applies only on the derived level of Being, i.e., after the (partial) detachment of God from the Being (*Seienden*), and furthermore it changes little structurally in the overall process. Had one wanted to conceive the origin of the world as an emanation process, it would have been logically flawless to represent the relation between Being (*Seienden*), God, and the Potencies in precisely this way. This is confirmed by the finding that Schelling used similar thought figures also at the time of the *Naturphilosophie* and Identity Philosophy, when he evidently cared less about the Creator God.

Schopenhauer, who at no time had such theological worries, could as a metaphysician bid farewell straightaway to "transcendent metaphysics," which assumes a primal being or Absolute that calls appearances into life and exists beside or behind them.¹⁰⁶⁹ His "immanent" metaphysics should never tear itself away from experience, but consider the thing-in-itself always in its relation to appearance; by assuming a thing-in-itself metaphysics indeed transcends the limits of experience, yet no *ens extramundatum* comes out of it. Rather, the task of

¹⁰⁶⁴ *Op. cit.*, 25, 36, 33, 26, 28, 29.

¹⁰⁶⁵ *Op. cit.*, 61, 89.

¹⁰⁶⁶ *Phil. der Offenbarung*, I = SW, XIII, 280 ff.

¹⁰⁶⁷ *Op. cit.*, 271.

¹⁰⁶⁸ *Op. cit.*, 292.

¹⁰⁶⁹ *Die Welt als Wille*, II, I, 17 = SW, III, 206.

metaphysics consists in explaining experience as a whole through its specific theories, while physics deals with the observation and explanation of individual experiences or phenomena.¹⁰⁷⁰ The cooperation of metaphysics and physics expresses on the level of knowledge the same monistic tendency as the close connection of thing-in-itself and appearance with one another does on the level of Being. Methodologically, in turn, the elimination of traditional transcendence is reflected in the rejection of the deductive-intellectualist procedure of traditional metaphysics. A metaphysics developed from pure concepts is out of the question for Schopenhauer. For in contrast to mathematical concepts, metaphysical ones are drawn from intuitions; thus nothing more can be drawn from them than what the intuitions underlying them contain; additional, i.e., empirical sources of knowledge are indispensable if grounded metaphysical knowledge is to be made possible.¹⁰⁷¹ Metaphysics may be regarded in this sense as an empirical science, but on the other hand physics must also rise to metaphysics, since left to itself it can grasp neither the beginning of the chain of causes and effects nor the original qualities of things and the natural forces manifesting in them. Whoever wants to stay with the explanations of physics makes things-in-themselves out of appearances and a *natura naturans* out of the *natura naturata*, without seeing that everything physical is at the same time a metaphysical; precisely the progress in the knowledge of appearances makes the need for a metaphysical explanation palpable. By metaphysics, however, physics is neither degraded nor made superfluous, just as the former is not by the latter; metaphysics and physics belong together in the same sense and extent as thing-in-itself and appearance.¹⁰⁷²

Schopenhauer's significance for the turn of metaphysical thought depicted here lies on the one hand in the blurring of the border between transcendence and immanence, on the other hand in the detachment of the Transcendent or the thing-in-itself from traditional anthropomorphic characteristics like consciousness or normative references. Both aspects were admittedly anticipated in earlier metaphysical constructions in various forms and combinations; for the first time, however, they emerge here on the modern basis of a positive evaluation of Kantian metaphysics critique and the results of the natural sciences with such matter-of-factness, and specifically in programmatic connection with one another and in a completely secularized philosophical language. Schopenhauer's influence in this regard remained nevertheless small, because his approach could satisfy neither the adherents of an even closer leaning on the sciences nor higher-flying metaphysicians. Thus he influenced few direct disciples¹⁰⁷³ or better

¹⁰⁷⁰ *Op. cit.*, 203 f., 201; cf. *Nachlaß*, III, 153 ff., 251.

¹⁰⁷¹ *Op. cit.*, 199 f.; cf. *Nachlaß*, I, 119, and III, 152.

¹⁰⁷² *Op. cit.*, 191 ff.; cf. *Nachlaß*, III, 399 f., 442 ff.

¹⁰⁷³ See e.g. Deussen, *Elemente*, esp. §§ 135 ff., 166 ff., where the symmetrical relationship between the pairs of concepts "Thing in itself - Appearance" and "Metaphysics - Physics" explained in the last paragraph is presented in Schopenhauer's sense.

known but rather isolated thinkers such as E. v. Hartmann, who put the transformation of metaphysics occurring in the 19th century into the words that henceforth metaphysics is only possible on the basis of an identity philosophy. He opined, however, that Hegel and Schopenhauer, who until then had been serious about the thought of identity "most decisively," cultivated the monistic approach one-sidedly and neglected the moment of difference in unity—a mistake which the "pluralistic" identity philosophy or metaphysics aspired to by himself should avoid.¹⁰⁷⁴ Its task was the unification of the two "essentially equal and only gradually different" spheres of the phenomenal world, i.e., the subjective-ideal and the objective-real, into a single third sphere, i.e., the metaphysical. The unity of these three spheres meant for Hartmann unity of the three sides of one and the same thing, for there was for him "no point of Being where all three spheres did not interpenetrate"; metaphysical activity does not consist as such, but solely in producing the two phenomenal spheres.¹⁰⁷⁵ It is not of interest here how Hartmann constructs his metaphysics in detail and thereby tries to overcome the opposition between Panlogism (Hegel) and Panthelism (Schopenhauer); his supreme metaphysical principle, the absolute Spirit, is in any case, just like Schopenhauer's Will, largely free of anthropomorphic and normative traits. And similarly to Schopenhauer, the monistic approach connects here with the demand for the application of the inductive procedure in metaphysics with precise consideration of the results of natural science—regardless of how literally this demand is understood or put into practice in each case. The "metaphysical sphere" is according to Hartmann recognizable only mediately, by inductive inferences.¹⁰⁷⁶ "Inductive metaphysics a posteriori" must first be created, for although one might think that after Kant apodictic metaphysics has become impossible, Kant himself had wanted to save judgmental apriorism in the phenomenal field; no less deductively-aprioristically have the Idealists (on the basis of thought), Schopenhauer (on the basis of willing) or the Materialists (on the basis of matter and force) proceeded.¹⁰⁷⁷

Materialism, which in the second half of the 19th century had a much greater direct and indirect influence than we can imagine today, generally promoted the monistic turn in metaphysics, which it itself represented most decisively. E. v. Hartmann regarded the reduction or abolition of the ontological distance between spirit and sensibility as well as between Finite and Infinite as a preliminary stage or prerequisite of his own metaphysics and welcomed Haeckel's Hylozoism in precisely this sense.¹⁰⁷⁸ Indeed, Haeckel seemed to emphasize the monistic character of his thought more emphatically than the materialistic. In theology, he rejected

¹⁰⁷⁴ *Grundriß*, 12, 11, cf. 87 ff.

¹⁰⁷⁵ *Op. cit.*, 1, 4, 5.

¹⁰⁷⁶ *Op. cit.*, 7, 8.

¹⁰⁷⁷ *Geschichte*, II, 592 ff.

¹⁰⁷⁸ *Op. cit.*, 599 f.

primarily the dualism of God and World, Spirit and Matter,¹⁰⁷⁹ while in monistic perspective he conceived of all beings as ever different combinations of one and the same substance; the law of the conservation of this substance formed for him the "cornerstone of monism" and implied both the conservation of force and that of matter, so that given the unity of force and matter it would be indifferent whether one wanted to call monism materialism or spiritualism.¹⁰⁸⁰ Not for the first time in the intellectual history of the modern age, materialistic and spiritualistic monism contributed complementarily to the demise of dualistically grounded traditional transcendence.¹⁰⁸¹ A spiritualistic monist like Bradley therefore feels compelled to name materialism and orthodox theology in the same breath as his two main philosophical enemies.¹⁰⁸² An important reason for his opposition to the latter lies obviously in his unwillingness to bind norms and transcendence (in the old sense) to one another; Good and Evil are for Bradley indeed only "relative factors, which cannot retain their special characters in the Whole".¹⁰⁸³ Between Absolute and Finite, a relationship is simultaneously established such that talk of transcendence simply must become superfluous. Human experience is indeed limited or finite, but what it contains is part of the universe and on the basis of the ontological homogeneity of all its parts the assumption would be inadmissible that outside the boundaries of this experience there existed an essentially different world. The wholeness of the universe, which exists only imperfectly in finite experience, would not look different than in this same experience if one could complete it. Therefore, talk of transcending to another world does not apply, especially since everything finite is inseparable from the Absolute, indeed positively essential for the Absolute.¹⁰⁸⁴

Even in metaphysical attempts to save the idea of God somehow, the notion of the Creator is usually shelved and the divine essence is more or less intertwined with the universe in its eternal becoming. Already in the 19th century, the increasing inclination of theists had been noticed to connect the immutability of the essence of the Absolute with the mutability of its activity and the potential infinity of the essential attributes with the finitude of their act in the closest possible way.¹⁰⁸⁵ In the metaphysics of the 20th century, there are likewise attempts to think the theogonic and cosmogonic process together in the conscious or unconscious

¹⁰⁷⁹ *Monismus*, 12 f., 31 f.

¹⁰⁸⁰ *Op. cit.*, 13 f., 39, 26 f.

¹⁰⁸¹ On this Kondylis, *Aufklärung*, 68, 196, 203 f., 264 f., 590 f.

¹⁰⁸² *Appearance*, 5.

¹⁰⁸³ *Op. cit.*, 430.

¹⁰⁸⁴ *Op. cit.*, 525 f. Findlay (*Ascent*, 29 ff.) also believes that the finite world is indispensable for the Absolute; the idea of the Absolute would be weakened if one wanted to leave the finite world out of it. Findlay does not want to identify the Absolute, which for him cannot be "purely spiritual and conscious", with the world, but on the other hand, he denies a supra- or extra-mundane Absolute, which would itself be finite in its opposition to the finite.

¹⁰⁸⁵ So Hartmann, *Geschichte*, II, 597.

succession of Hegel and Schelling. Neither God nor the world can reach the state of static perfection, believes Whitehead, for both are subject to the highest metaphysical principle, namely the creative advance to the new, whereby both become the driving force for the renewal of the respective other side and in their movement towards one another change gradually in order to meet structurally as far as possible. The doctrine of the transcendent Creator should therefore be abandoned. It was the great error of theology to make of God a highest reality which disposed of the powerless world-creature at will and therefore bore the responsibility for all events in it. Philosophical metaphysics should end this juxtaposition of divine will and world events, emphasize the structural or effective commonalities of God and world, and subject God to the same metaphysical categories as all other actual entities of the world.¹⁰⁸⁶ Approximately at the same time, Scheler spoke with reference to E. v. Hartmann and Hegel of the "intertwining of the timeless becoming-being (*Werdesseins*) of the Deity with world history or better with the world as history". In world history, the relaxation of the primal opposition of Spirit and Drive (*Geist und Drang*) in the functionally uniform world-ground manifests itself, whereby the personal God of theism stands not at the beginning of the world process, but only at the end of the divine becoming process as its ideal goal.¹⁰⁸⁷ By contesting the theistic premise from a dynamic-evolutionist perspective, he can place the relationship of man to the world-ground and simultaneously the justification of metaphysics in a new light. Man ceases now to be chained as a creature to his insurmountable finiteness or to be a slave of the Deity, and is called upon to co-produce the God becoming out of the primal ground, specifically by seeing himself grounded in the primal being during the active commitment to this purpose and thus lending self-consciousness to the primal being itself. Metaphysics does not shy away from the thought of a "unfinished God" yet to be created, if it does not want to be a substitute for religion, thus "no insurance institution for weak people in need of support," but sees in man the fellow combatant and co-worker of the Deity.¹⁰⁸⁸ To the extent that God, (world) history, and man grow together within the theogonic-cosmogonic process, anthropology becomes the core piece of metaphysics, metaphysics transforms into "Metanthropology," and this for two reasons: because man unites all stages and spheres of Being in himself, so that the question of man becomes *eo ipso* the question of Being, and because he as fellow combatant and co-producer of God can keep open the only possible access to God—not by theoretical considerations, but by his active commitment to God, which is at the same time commitment to his own self-realization.¹⁰⁸⁹

¹⁰⁸⁶ *Process*, 349, 342; *Adventures*, esp. 169 ff. Cf. Leclerc, *Whitehead's Metaphysics*, 192 ff., as well as the essay by D. Williams, see List of Cited Works.

¹⁰⁸⁷ *Philos. Weltanschauung*, GW, IX, 102 note.

¹⁰⁸⁸ *Die Stellung des Menschen*, GW, IX, 70, 71.

¹⁰⁸⁹ *Philos. Weltanschauung*, GW, IX, 83; *Weltanschauungslehre*, GW, XI, 53.

We have thus arrived at the point where we can survey to some extent the effects of the modern primacy of anthropology on the reshaping of metaphysics. These effects are, of course, not to be understood as if metaphysicians had adopted the primacy of anthropology in the form it assumed with the critics of metaphysics for the purpose of combating metaphysics. On the contrary: metaphysicians, i.e., all who want to interpret world events and man with regard to principles defined however as transcendent or anchored in Being, have rejected the anti-metaphysically understood primacy of anthropology or even dismissed it as hybris and delusion of the modern age. It is all the more remarkable that they saw themselves forced to take into account the intellectual-historical facts created by the anti-metaphysical directions of the modern age. Metaphysics has had to open itself not only (as already in the 17th century) to the natural sciences, but also (in the time after the Enlightenment) to the humanities (*Geisteswissenschaften*), i.e., the sciences of man and his history—and what in the navel-gazing of philosophers or metaphysicians themselves not infrequently appeared as pathbreaking renewal and intellectual daring, represented in reality a delayed, distorted, or encrypted registration of shifts that had long since taken place in the intellectual-historical spectrum. The connection of anthropological and metaphysical levels now takes place through the establishment of the thesis that man is the privileged or the only access to Being or the Absolute. In this form, the problem of thinking the Absolute and Man together (whereby Man implies Knowledge and History) posed itself for Hölderlin, Schelling, and Hegel as they attempted to refine their monistic metaphysics philosophically in the light of the epistemological questions raised by Kant and Fichte. They thought as follows: the knowledge of finite man is finite; in the state of finiteness in which we find ourselves (also) as (philosophically) thinking men, no other access to the Absolute is open to us than precisely man and his horizon of knowledge; what should a philosophy look like now that sees in man, in thought, and in itself something finite, but notwithstanding assumes the primacy of the Absolute (i.e., does not want to go along with Kant's Copernican turn and does not want to allow the metaphysical agnosticism connected with it), although it knows that it must express the Infinite through the Finite and thereby necessarily start from the Finite—that is, its metaphysical basic assumption must come into contradiction with the fact of its own existence as a form of thought?¹⁰⁹⁰ The later dispute between Schelling and Hegel over the knowability of the Absolute overshadowed the problematic of the connection of the Anthropological and Metaphysical, although it was closely connected with it. For Hegel wanted to base the thesis of the knowability of the Absolute on a purification of knowledge from its empirically or anthropologically conditioned aspects, by expanding the experience of human consciousness to the self-movement of the absolute Spirit and letting the "Logic" follow the "Phenomenology"; Schelling, on the other hand, gave up in his "positive" philosophy the attempts of the early Identity System to get as far as possible in the

¹⁰⁹⁰ Kondylis, *Entstehung*, 366 ff., 580 ff.

knowledge of the Absolute with parallel critical reflection on the finiteness or possibility of philosophical knowledge in general, and instead he set about representing the Absolute in its movement as it were beyond the boundaries of human knowledge and thematizing this knowledge itself no longer in its suitability as an instrument for grasping the Absolute, but rather integrating it as a stage or phase into the movement of the Absolute.

In the metaphysics of the 20th century, the knowledge problematic in this form hardly played a role. Stricter epistemological questionings were therefore rather suspect to metaphysicians because they had connected themselves at the latest since Neo-Kantianism with epistemological views that at least took the detested "scientism" seriously. Anthropology and metaphysics therefore did not find each other on this detour, but in a much more direct way, which incidentally is also prefigured in the early work of Hölderlin, Schelling, and Hegel: man is viewed here in the diversity of the layers of Being that constitute him, and simultaneously in the diversity of his existential situations and peripeteias as well as in the diversity of the historical situations in which he actualizes his possibilities; this multidimensional diversity of the human is in turn seen and interpreted in its metaphysical reference or within the framework of the dialectic of Absolute and Finite.¹⁰⁹¹ The consciousness of the dynamics of human self-unfolding and of the richness of history was of course a legacy of the Enlightenment, from which modern humanities also originate. And precisely the humanities, as they took shape in the course of the 19th century, offered the stimulus and at the same time the material for the new intertwining of anthropology and metaphysics made inevitable by the general intellectual-historical situation. Kierkegaard had already depicted central existential situations of man as functions of his ontic relationship with the Absolute and thus won from the inner life of existence the material for metaphysical and not merely psychological considerations.¹⁰⁹² Kierkegaard's individual moved, however, as it were in a historical vacuum, and furthermore related to a transcendence that, despite all weakening of its conventional features and despite its transformation into a personal interlocutor, was still the Judeo-Christian one. In contrast, the representatives of the metaphysical direction of which we are speaking here strove for an inclusion of (intellectual-)historical viewpoints into the anthropological-metaphysical consideration and praised the relevant preparatory works of Dilthey or Scheler,¹⁰⁹³ while many a phenomenologist promised himself a firmer methodical basis for gaining the new doctrine of the Absolute from the expansion of the phenomenological reduction in precisely this sense.¹⁰⁹⁴ On the other hand, the question of the Absolute or Being did not pose itself here in the sense of the never-breaking and conscious dialogical relationship of human existence to its ground already known through

¹⁰⁹¹ *Op. cit.*, esp. 81 ff., 268 ff., 366 ff., 467 ff., 498 ff.

¹⁰⁹² Cf. Buber, *Problem*, 92.

¹⁰⁹³ See e.g. Metzger, *Phänomenologie*, 186 f.; cf. Müller, *Existenzphilosophie*, 32 ff.

¹⁰⁹⁴ Landgrebe, *Phänomenologie*, 159, 164 ff.

certainty of faith and moreover ontologically heterogeneous, but as an attempt to first gain access to a Being that shows itself only mediately in the human situation. What leads beyond man is not so much a certainty fixed in advance about the existence and nature of transcendence, but rather the manner of questioning: anthropology precedes ontology as the science that poses the question of the Being of man in the horizon of the question of the Being of beings (*Seienden*); the manner in which the question of man is posed thus decides the clarification of the question of Being. In doing so, the thought effort must get into the tension field of human finiteness and infinity of Being; precisely the finding that man is attached to beings (*Seienden*) is, however, now recognized as fundamental with regard to the metaphysical question of knowledge of Being.¹⁰⁹⁵ Man and his cognitive behavior should form the starting point of metaphysics; in this cognition, as it is conditioned by the Being of man, the Being transcending man reveals itself, whereby transcendence is a distinct trait of man anchored in Being and simultaneously the origin of all beings; on the basis of the ontically given intertwining of the two meanings of transcendence, the cognition of Being takes place and the ontological ground of human existence is uncovered.¹⁰⁹⁶

This general schema, which is already found in the late Scheler, has also been guiding for Heidegger's thought notwithstanding the peculiarities in its application. Heidegger indeed did not dispute the connection between philosophical anthropology and fundamental ontology; he only opined that the latter formed only a fragment of the former, namely that in which the question of man is posed with regard to the question of Being.¹⁰⁹⁷ Behind metaphysical basic questions lies the problem of what man is, yet not just any anthropology can be made the basis of metaphysics, but only that which asks about truth or Being in general and not merely about man.¹⁰⁹⁸ Dasein remains nevertheless that being (*Seiende*) to whose constitution it belongs to pose the question of Being and thus to become conscious of itself as Being; in the fact that it poses the ontological question, its ontic superiority over other types of beings shows itself. This privileged being, which represents the only available access to Being, has however temporality as its own Being: temporality is the meaning of the Being of Dasein which understands Being, and time therefore forms the horizon of all understanding of Being and every interpretation of Being.¹⁰⁹⁹ In this way, the path opened up for the inclusion of historicity into the fundamental-ontological analytic. These two viewpoints—i.e., the privileged position of Dasein and the historicity of the Ontic—retained their primary substantive and methodical significance even after the so-called "Turn" (*Kehre*). The direct question of Being indeed overshadows the

¹⁰⁹⁵ Metzger, *Phänomenologie*, 134, 154, 155.

¹⁰⁹⁶ Landgrebe, *Phänomenologie*, 157.

¹⁰⁹⁷ *Sein und Zeit*, 17.

¹⁰⁹⁸ *Kant und das Problem*, esp. 187 ff.

¹⁰⁹⁹ *Sein und Zeit*, 17.

initial fundamental ontology, in which it was a matter of Dasein (albeit as access to Being and as Being), on the other hand, however, this Being forms no unalterable substance or transcendence, but is historical; precisely for this reason the question of Being aims not at an ontology in the traditional sense, but at the illumination of the historical existence (*Dasein*) of man within the framework of the history of Being;¹¹⁰⁰ if therefore some existence phenomena connected with historical facticity (like conscience, death, guilt, etc.) lost weight as a result of the Turn, the interpretation of Being under the viewpoint of historicity ensured a continuation of the original historical approach, specifically on an expanded basis.¹¹⁰¹ Within the history of Being, the privileged position of Dasein shows itself in the significance of the question, which it alone can pose and answer, for the destiny of Being itself—more concretely: for the fate of the Occident.¹¹⁰² For man is that being that dwells as ex-sistence in the proximity of Being; he is the locality of the truth of Being in the midst of beings, the clearing of Being and the shepherd of Being.¹¹⁰³

The direct thematization of the question of Being brought about by the Turn established the perspective within which Heidegger's critique of traditional metaphysics was articulated.¹¹⁰⁴ This critique was accompanied by an expansion of the culture critique already emphatically highlighted at the time of the fundamental-ontological thought effort—an expansion that had as its target what we may call the hybris of man attached to beings against Being. Against this hybris turned the undertaking to define the human essence from the essence of Being,¹¹⁰⁵ in order thereby to theoretically initiate a devout harmonization of man with his essential ground. A determination of the essence of man that had such things in view had to eliminate the factors that caused the adherence to beings with simultaneous turning away from Being: meant here are uninhibited, power-addicted subjectivity and blind, technically oriented instrumental rationality; the ontic grown-togetherness of Being and Man could only appear when one had previously made every effort to take the determination of the essence of man out of subjectivity, but also out of that of the *animal rationale*.¹¹⁰⁶ This effort for the unforced insertion of man into Being was theoretically supported by a doctrine of Being in which traditional metaphysical separations and not least the ancient and Christian conception of transcendence were rejected. The question of Being does not mean the question of the grounds of the essence of a being (*Seienden*), i.e., the distinction between Being and beings (*Seienden*) already known in traditional metaphysics is not used to see Being in the perspective of beings and thus to make of it a

¹¹⁰⁰ See e.g. *Einführung*, 32.

¹¹⁰¹ Cf. the apt remarks by Löwith, *Diltheys und Heideggers Stellung*, 257.

¹¹⁰² *Einführung*, 28 ff.

¹¹⁰³ *Platons Lehre*, 90, 69, 77.

¹¹⁰⁴ See below Sect. 4a (bb).

¹¹⁰⁵ *Einführung*, 106, cf. 128 f.; *Platons Lehre*, 79.

¹¹⁰⁶ *Was ist Metaphysik?*, 13.

(highest) being (*Seiendes*), a Meta-physical or a Transcendence.¹¹⁰⁷ Like the newer critics of metaphysics, Heidegger also combines his rejection of Platonic-Christian dualism with the attempt to think Being and Appearance (*Schein*), Being and Becoming together. The "hidden unity of Being and Appearance" is to be made understandable by the assumption that Appearance means appearing (*Erscheinen*), but Being essences (*wes*) precisely as appearing; on the other hand, Being and Becoming belong together in the same sense as Being and Appearance, for "as becoming is the appearance of Being, so appearance as appearing is a becoming of Being".¹¹⁰⁸ Heidegger also follows the general tendency of secularized metaphysical thought after the Enlightenment when he withdraws the conventional normative attributes from his highest ontological instance, namely Being, and refrains from deriving normative commandments from its nature. The idea of Ought arises at the moment when (in Plato) Being is conceived as mere Idea, which is opposed by the mere Idea of the Good; the dispute between Being and Ought thus becomes the necessary as well as fatal concomitant of metaphysical thought.¹¹⁰⁹

From an intellectual-historical point of view, the finding is not unimportant that Heidegger, in working out his doctrine of Being, fell back directly on thought structures of German Idealism and especially on Schellingian ideas. When he struggled for a deeper understanding of the relations between Being and beings, he himself referred to the relevant insights of speculative Idealism and opined that since that epoch thought has remained forbidden to conceive identity abstractly or as mere sameness.¹¹¹⁰ He could study the "mediation prevailing in unity" or the dialectic of Ground and Becoming as well as Ground and Existence on the basis of Schellingian texts,¹¹¹¹ but at the same time Schelling's expositions on the Being (*Seiende*) and God also became directive for his own reflections on the relationship between Being (*Sein*), Ground, and beings (*Seienden*) (terminologically it is to be noted that Schelling's "Seiendes" means Heidegger's "Sein" and vice versa). Just as Schelling's in itself groundless and unfounded Being (*Seiendes*) provides the ground or foundation of the Deity by generating it from its womb, without however separating from it, so too Heidegger's Being (*Sein*), which is itself no God or world-ground¹¹¹² and also, as abyss (*Abgrund*), has no ground, gives the Ground its essence by belonging together with it.¹¹¹³ From its own coinage, Being "clears" itself and becomes by virtue of the difference contained in it λόγος and Ground, which grounds beings (*Seiende*), in order to be grounded or

¹¹⁰⁷ Cf. Marx, *Heidegger*, esp. 186 f., 193, 195.

¹¹⁰⁸ *Einführung*, 80, 75, 77, 87, 88.

¹¹⁰⁹ *Op. cit.*, 150 f.

¹¹¹⁰ *Identität*, 12.

¹¹¹¹ *Schellings Abhandlung*, esp. 132, 135, 137, 149, 153, 159 ff.

¹¹¹² *Platons Lehre*, 76.

¹¹¹³ *Satz vom Grund*, 92, 93.

caused in turn by beings—insofar as this is the fullness of Being;¹¹¹⁴ as *Ground*, Being is thus dependent on its own fullness in the same sense as Schelling's God can be only as the unity of all Potencies. If Being is conceived only as Ground and beings as the merely Grounded, then the matter is seen exclusively in the perspective of difference—and from this sway of difference stems precisely the onto-theological constitution of traditional metaphysics, for which there can be only the one-sided relation of Ground to Grounded between Being and beings together with the obvious theological implications.¹¹¹⁵ Schelling wanted to eliminate the same theological implications when he contested the orthodox version of monotheism and let his God—just as ultimately all other forms of "Being"—be grounded in the "Being" (*Seienden*); and he also represented the view that metaphysics will advocate false religion as long as it confuses beings and Being (*Seiendes und Sein*), does not pose the question of the Being (*Seienden*), and thereby forgets "that *all* Being (*Seyn*) can be only the Being of the Being (*Seyenden*) itself or of *that which Is*".¹¹¹⁶

In Jaspers, the authoritative anthropological component of modern metaphysical thought makes itself felt in that transcendence is seen and thematized exclusively in the perspective of existence, while every claim to the elaboration of an objective doctrine of Being with exclusion of this perspective is declared untenable. The Being of traditional ontology is an empty concept that can make understandable neither what is common to all Being nor a specific Being as origin of all Being—indeed the question of Being as Being is as such unintelligible for a consciousness.¹¹¹⁷ No metaphysics can therefore convey objectively valid knowledge about the Being of transcendence.¹¹¹⁸ The denial of rational graspability of transcendence could have been interpreted as a fideistic confession if Jaspers had not also explicitly disputed the other-worldliness of transcendence. The doubling of the world and the assumption of a Beyond that is just as material as the This-side form "illusions of existential distress," for thereby merely things and events of this world are transposed in modified form into another world to become "objects of fear and consolation".¹¹¹⁹ If transcendence is thus no Being separated from our world

¹¹¹⁴ *Identität*, 60 f.

¹¹¹⁵ *Op. cit.*, 63 f.

¹¹¹⁶ *Philosophie der Mythologie*, II = SW, XII, 34; Schelling's emphases. Hadot (*La distinction*, esp. 148 f., 151) demonstrated a similar thought structure using the example of the Neoplatonic distinction between Being and the Existent: Being or the One (Eînai or Hén) is rationally unknowable here and can only be imagined via the detour of negative theology, while the Existent (Ón) represents the first Intelligible and the first Form, through which the separation of Subject and Object (thus of different existents) takes place. On this same thought structure in the unification philosophy of Hölderlin, Schelling, and Hegel see Kondylis, *Entstehung*, 318 ff., 450 ff., 596 ff. The late Hegel's decision for the knowability of Being or the Absolute through the equation of Substance and Subject had to entail his detachment from this schema.

¹¹¹⁷ *Metaphysik*, 2.

¹¹¹⁸ *Op. cit.*, 32.

¹¹¹⁹ *Op. cit.*, 12, 9.

and no future home, it can be real only as "presence in time," its place is the "boundary on which I stand before it when I am authentically".¹¹²⁰ "Authentic" is existence therefore only in relation to transcendence, i.e., when it feels an infinite insufficiency, wants to go beyond the barriers of the finite, and in doing so grasps in anticipation what it seeks.¹¹²¹ The search and the need of existence for transcendence, not the rational metaphysical investigation of its objective nature, shapes the image of transcendence; the appearance of transcendence therefore necessarily changes with existence, so that transcendence can be brought to speech for existence in temporal existence (*Zeitdasein*).¹¹²² Corresponding to this thorough interlacing of transcendence and existence problematic with one another, metaphysics does not thematize transcendence itself, but only the existential reference to transcendence.¹¹²³ Transcendence is grasped by existence only historically, at the same time it must however be thought as a magnitude independent of existence and suprahistorical¹¹²⁴ — in this "paradox," however, a psychological mechanism is recognized rather than a real possibility of existence for the objective grasping of transcendence: transcendence as idea simply cannot exert the expected effect on existence if it does not bear the features of the objectively given and lying beyond historical relativity. The respective contents of the various ideas of transcendence, i.e., the historically known metaphysics, theologies, or mythologies, are incidentally not to be taken at face value, but to be evaluated according to whether they can serve as means for the appropriation of the thought of transcendence on the part of existence.¹¹²⁵

In other directions of existentialism, which emerged from more or less free modification of phenomenological motifs but did not want to follow Heidegger in his Turn, there was an exclusive and explicit binding of metaphysics to the problematic of the human. Talk of metaphysics or ontology continued nevertheless because the question of man was posed as the question of Being and clothed in the corresponding (reinterpreted) categories of the philosophical tradition. Sartre, who defined metaphysics as "un effort vivant pour embrasser du dedans la condition humaine dans sa totalité",¹¹²⁶ tied in tacitly with Bergson's fundamental connection of (modernized) metaphysics with the thought of becoming¹¹²⁷ and tried to master the entire problematic of Being through the complementary thought work of metaphysics and ontology, which should relate to one another like history and sociology. Ontology deals with the constants of Being or with the In-itself, metaphysics investigates on the other hand

¹¹²⁰ *Op. cit.*, 19, 13.

¹¹²¹ *Op. cit.*, 6, 3.

¹¹²² *Op. cit.*, 19.

¹¹²³ *Op. cit.*, 34 f.

¹¹²⁴ *Op. cit.*, 22 f.

¹¹²⁵ *Op. cit.*, 10 f., 24 ff.

¹¹²⁶ *Situations*, II, 251.

¹¹²⁷ See above note 26.

becoming in the form of questions about the origin of the For-itself from the In-itself, about the origin of the world as unique concrete totality through the processes taking place in the For-itself, and not least about the action of the For-itself; the transition from ontology to metaphysics takes place by thematizing, in the course of the ontological investigation itself, the process of the grounding of the self through the rupture of the identical Being of the In-itself as well as the project of the For-itself to ground itself as Being.¹¹²⁸ Even more clearly, the connection to Bergson's dynamic metaphysics concept appears in Merleau-Ponty's thought, while the contents change. The Metaphysical is to be sought for him only in the This-side, specifically in the realm of the "sciences de l'homme"; metaphysical consciousness has no other objects than everyday experience, fellow human beings, history, and culture; metaphysical observation consists in conceiving this human world not as a closed, lawful, and thoroughly clear whole on the basis of a coherent system of concepts, but seeing and experiencing it in its fundamental paradox, in the richness of its unsuspected possibilities, in the suddenness and uniqueness of its events. Scientistic objectivism errs in the assumption of being able to ground an all-sided systematic knowledge while excluding the subject as bearer of experience-conditioned views and corresponding practical goals. Genuine metaphysics, which indeed opposes this assumption but not science in itself and in general, begins where the alleged evidence of the object ends and we become aware of the radical subjectivity of our entire experience as well as of the fact that the latter cannot provide the measure of all Being, although it must on the other hand be coextensive with all Being accessible to us. It is the task of metaphysics to describe this paradox of consciousness as well as the paradoxes of human interaction.¹¹²⁹

The tone-setting inclusion of historicity or of the anthropological in metaphysical discussions took several forms, which we need not go into here.¹¹³⁰ We conclude our overview of the transformations of metaphysical thought as a result of the shifts in the intellectual-historical spectrum that have occurred since the Enlightenment with a reminder of Nicolai Hartmann's *Ontology*, which, although in its objectivistic treatment of the problematic of Being with exclusion of the historicity factor sometimes seems naive or outdated, precisely for that reason lets important aspects of the restructuring of metaphysics, which has become inevitable, appear quite uninhibitedly. Hartmann's distinction between ontology and metaphysics rests on the (agnostic) conviction that metaphysical problems "in the narrower sense" contain an "irremovably irrational element" and therefore their insolubility is a natural consequence of the "fundamental failure of human categories of knowledge".¹¹³¹ At the same time, however, this

¹¹²⁸ *L'Être et le Néant*, 683 f., 689.

¹¹²⁹ *Le Métaphysique*, 146, 163 ff., 171.

¹¹³⁰ See e.g. Wahl, *Traité*, 367 ff., 509 ff.; Ehrlich, *Metaphysik*, 18 f., 80 ff.; Sauer, *Metaphysik*, passim.

¹¹³¹ *Grundlegung*, 173.

distinction is intended to revive research within the broader metaphysical problem circle by making the "still most unmetaphysical in metaphysical problems," i.e., "the ontological element" in them, the object of philosophical reflection. This involves questions of forms, modes, and relations of Being, which are most uniform and homogeneous, thus most rational, and therefore offer the "surfaces of attack for possible treatment." Ontology understood in this way can provide the basis of metaphysics even if criticism destroys speculative systems.¹¹³² Through the work of this ontology, metaphysical problems can be sought and found where they actually are: no longer in the "Beyond of the world" or beyond experience, but "in closest proximity, tangible, in the midst of life"—epistemologically speaking: in the "background of the philosophical sub-disciplines," where they "form a kind of residue with which the special methods of these areas do not cope".¹¹³³ Precisely because Hartmann's distinction between ontology and (traditional) metaphysics aims at the settlement of the latter, his ontology is structurally and methodically conceived in such a way that it stands out *a limine* from metaphysical dualism and intellectualism. First, the separation between apparent and real world is rejected with the argument that the difference between appearing and non-appearing represents no difference in Being, since both are equally Being.¹¹³⁴ In the same sense, the confusion of Being with a certain category of Being, for instance "higher Being," is rejected; the "height of Being" could be different, the mode of Being remains the same.¹¹³⁵ Hartmann emphasizes here that no neutral Being (*Seiendes*) exists, i.e., there is only So-being (*Sosein*) or That-being (*Dasein*); the moment of Being as such falls under the conjunctive relation "real or ideal Being" and does not occur by itself.¹¹³⁶ Ideal Being, in turn, has nothing to do with "Spirit," but means logical and mathematical magnitudes, which is why it was discovered "only late".¹¹³⁷ Besides (spiritual) transcendence, every normative coloring of the concept of Being, every equation of *ens* and *bonum* is also disputed.¹¹³⁸ This equation is connected, at least partially, with that "false metaphysical need for unity" of which Hartmann wants to know nothing. The ontological unity of the world need not take the form of a last principle, a last foundation, or an Absolute; it must therefore not be constructed prematurely on the basis of a deductive procedure, but the knowledge of the in-itself First can be gained only as last knowledge on the basis of the research work of the other fields of knowledge. The concept of "fundamental philosophy" must change fundamentally when one has realized that foundations "become visible only in looking back from that which rests upon them".¹¹³⁹

¹¹³² *Op. cit.*, 30, 32 f.

¹¹³³ *Op. cit.*, 27 f.

¹¹³⁴ *Op. cit.*, 58.

¹¹³⁵ *Op. cit.*, 71, 76.

¹¹³⁶ *Op. cit.*, 140, 141.

¹¹³⁷ *Op. cit.*, 243, 245.

¹¹³⁸ *Op. cit.*, 62 f.

¹¹³⁹ *Op. cit.*, 32 ff.

In general, it can be said that the consideration of metaphysics under ontological viewpoints has facilitated the detachment from traditional dualism or from the thought of transcendence, or rather has itself been a symptom of this detachment and of the enforcement of monistic tendencies—under whatever signs. For whoever wants to define metaphysics with Aristotle as the science of Being (*Seienden*), must simultaneously distance himself from the definition of metaphysics as science of the Transcendent or even deny it, since Aristotle allegedly understood the Being of the universal as transcendent reality in the sense of a two-world theory.¹¹⁴⁰ In the next section, we will moreover see that the epistemological and gnoseological reinterpretation of the concept of metaphysics was occasionally undertaken with explicit appeal to the Aristotelian definition of metaphysics as science of first principles. Obviously, such a view—in the 20th century just as in the 17th or 18th—implies a rejection of traditional metaphysics. Metaphysics could insofar live on only as critique of metaphysics. But even the more orthodox metaphysical directions, which by no means wanted to reduce metaphysics to epistemology and methodology, saw themselves forced in the 19th and 20th centuries, due to the collapse of the two-world doctrine and the enforcement of anthropological and historical viewpoints, to appear often as critiques of the metaphysical tradition. The Janus face of modern metaphysics, which wanted to be metaphysics and had to be critique of metaphysics, was marked by the scars left by the anti-metaphysical attacks of earlier times.

¹¹⁴⁰ See e.g. Martin, *Einleitung*, 139. Cf. already Eucken, *Geschichte und Kritik*, 60 ff. A good thirty years later (1909), Eucken is not content with condemning formalism and conceptual deduction, but demands the inclusion of the "historical element" in metaphysical investigations (*Geistige Strömungen*, 105). Cf. below notes 176, 243.

3. Metaphysics and Science or Metaphysics as Theory of Knowledge, Logic, Ontology and Epistemology

The epistemological interpretation of the concept of metaphysics initiated by Bacon and made common in the Age of Enlightenment was not forgotten in the 19th century. Positivists like Mill, who stood in the direct succession of a main current of Enlightenment thought, opined that metaphysics deals with mental operations in the search for truth, with the question of innate ideas, etc.; for the agnostic Mill, of course, it could not give final information about the nature of mind and matter, of space and time, etc.¹¹⁴¹ In Germany, although speculative idealism had displaced the Enlightenment interpretation of metaphysics, it nevertheless lived on—not because the terminology of the early Fichte¹¹⁴² was kept in memory, but rather because of the persisting effect of Kantian thought in the background. Thus, according to Fries, the critical method of philosophy consisted in "regression," i.e., in the "subjective turning of all speculation toward an anthropological investigation,"¹¹⁴³ which did not stop even before the ideas of reason.¹¹⁴⁴ Metaphysical discussions, such as those about the relationships between nature and idea, should be clear about the fact that these are subjective conditions, i.e., those determined by the conditions of the human faculty of knowledge and not lying in the nature of things; it is not a matter of different worlds here, but only of different human modes of knowledge.¹¹⁴⁵ This "subjective significance of the main differences" also underlies the fundamental distinction between the natural and the ideal view of things—a distinction which, according to Fries, is to replace the traditional division of metaphysics into ontology, psychology, cosmology, and

¹¹⁴¹ *System of Logic*, Introduction = CW, VII, 8 f. Buckle also relates the term "metaphysics" exclusively to epistemology, but by this he does not mean this latter directly, but rather the abstract mode of consideration of epistemologists who want to derive the laws of the human mind from the isolated facts of individual consciousness and thereby completely neglect the historical investigation of the actions of the human race (*History*, 93 note 18, 95, 96). Spencer likewise raises the accusation of subjectivism against "metaphysicians" like Berkeley, Hume and Kant, to whom he opposes his "realism" (*Principles of Psychology*, II, 502). On Spencer's use of the concept of metaphysics in the "realistic" epistemological sense see below in this section. On Hamilton's ambivalent concept of metaphysics see below Sect. 4a (aa), Note 284.

¹¹⁴² Fichte distinguishes between metaphysics in the transcendent and in the transcendental sense; the latter, also called transcendental philosophy, coincides with the *Wissenschaftslehre* (Theory of Science), which examines being not "in general" (*überhaupt*), but "for us". The most important passages: SW, I, 32 f. (*Über den Begriff d. WL*), 285 f. (*Grundlage d. ges. WL*), 456, 494 (*Zweite Einleitung*); GA, 2. Abt, IV, 44, 45, 184 ff., 236 (*Vorlesungen über Platners Aphorismen*); GA, 3. Abt., IV, 76 (Letter to Schelling of September 1799).

¹¹⁴³ *System*, § 22 = p. 104.

¹¹⁴⁴ *Op. cit.*, § 89 = p. 436 f.

¹¹⁴⁵ *Op. cit.*, § 12 = p. 48.

theology and carry the new division of "speculative" metaphysics into higher and lower.¹¹⁴⁶ However much the traces of old dualisms can be recognized in Fries's classifications, the mantle of "subjective" observation covering ontological essential differences falls over them; metaphysical unification and simultaneous hierarchization is possible here because the human faculty of knowledge appears multi-layered in its unity. The logical conclusion from this was drawn by Apelt, a student of Fries, who saw the necessity and universal validity of metaphysics grounded in human reason and at the same time completely separated the question of the validity of metaphysics from the question of its object: Metaphysics, defined from the faculty of knowledge, occupies itself with no special object and therefore does not differ from the other sciences on the basis of its object.¹¹⁴⁷

Obviously, we are dealing here with a later variation of the modern replacement of the primacy of the *certitudo objecti* by the primacy of the *certitudo modi procedendi*. However, it contains an implication that was particularly current around the middle of the 19th century: if metaphysics has no object of its own, it can approach the sciences much more closely than in the case where it had one, namely a transcendent one. In view of the spectacular rise of the sciences, no other question posed itself to the philosopher or metaphysician in that intellectual-historical moment with such sharpness as that of the relationship of his discipline to positive science. Apelt believed he had found in the theory of induction the "nodal point" "in which empiricism and metaphysics hung together", so that philosophy and natural science—or the philosophical mode of thought of the Germans and that of the English—could be brought to a common denominator.¹¹⁴⁸ This same wish manifests itself in varying forms, but with equal strength, in philosophers of different provenance, e.g., in very free continuers of Kantianism like Herbart or in some who, like Lotze with his teleological idealism, were otherwise not averse to speculative high flights, and also in converts from the Hegelian camp like, for example, Zeller. Even during Hegel's lifetime, Herbart wrote that a rule of metaphysics over the empirical sciences would appear "nowadays almost ridiculous." Metaphysics, incidentally, as history shows, has no constant conceptual system, but always adopts or creates a new one; to the modern natural scientist, it must and can offer a "treasure of hypotheses" or certain basic concepts for the "construction of possible cases." Herbart wants no metaphysics written like a "kind of poetry," but on the contrary, wishes to show himself as a metaphysician "completely unpoetic, indeed if one will, anti-poetic".¹¹⁴⁹ The unavoidability of metaphysics rests, after all, on the

¹¹⁴⁶ *Op. cit.*, § 12 = p. 47. Lower [metaphysics] comprises the theory of natural laws, the theory of bodies and anthropology, the higher is the theory of faith. Besides speculative metaphysics there exists practical [metaphysics] or teleology, which in turn divides into a theory of nature (ethics or subjective teleology) and a theory of ideas (objective teleology, final purpose of the world).

¹¹⁴⁷ *Metaphysik*, §§ 9, 16, 8 = pp. 23, 55, 23.

¹¹⁴⁸ *Theorie der Induction*, Preface.

¹¹⁴⁹ *Kurze Enzykl. d. Phil.*, §§ 192 ff. = SW, IX, 256 ff.

indispensability of general concepts for grasping the given; this conceptualist attitude, however, must not degenerate into an ontology of the possible in the sense of Wolff; rather, metaphysical conceptuality must relate to reality despite its other differences from physical observation and never fall under the suspicion of "inventing and describing a world according to its fantasy".¹¹⁵⁰

Lotze, too, was impressed by the observation that the efforts of metaphysics could "in no way" measure up to the successes of the natural sciences, and proceeded in his reflections on the problem of metaphysics from the question of its relationship to science.¹¹⁵¹ It was clear to him that the preoccupation with the world of the thinkable or of ideas belonged to the past and that henceforth the "facts of change" and the "given world" should stand in the center of metaphysical investigations.¹¹⁵² Metaphysics can neither convey final knowledge about the nature of things nor may it formulate the special laws of nature; it takes over the final processing of the facts secured by the empirical sciences and develops ideal forms for grasping the relationships between the elements of every reality as well as the general conditions of Being or occurring (*Geschehens*);¹¹⁵³ finally, it makes the object of its investigation that which is the principle of investigation for the empirical sciences (concepts such as lawfulness or causality, e.g.).¹¹⁵⁴ Only on this basis does the task fall to it to form a "determinate systematic whole".¹¹⁵⁵ Zeller viewed the goal of metaphysics similarly. According to his view, it should "comprehend the ordered connection of Being," but to be able to do this, it would have to perform a double preparatory work, namely an ontological and an epistemological one. Ontology or the ontological part of metaphysics should clarify the origin, meaning, and use of concepts concerning the fundamental constitution of Being (things and properties, cause and effect, possibility and necessity), while the critique of knowledge had to investigate the basic concepts of the special sciences (properties of matter, laws of motion) from a higher perspective.¹¹⁵⁶ It is striking that the metaphysical basic concepts mentioned by Zeller are all such that have a direct epistemological, specifically natural-scientific relevance. And indeed, since the middle of the 19th century, the endeavor becomes noticeable to give such concepts a metaphysical status or to use them as formal categories and to base a scientifically justifiable general doctrine of Being upon them, whereby recourse is sometimes also made to the philosophical tradition with modernizing intent. It is therefore not surprising if many an obscure author raises the claim to

¹¹⁵⁰ *Allgem. Met.*, §§ 161-162, 166, 195 = SW, VIII, 10 ff., 15, 49.

¹¹⁵¹ *System*, II, 603, 6 ff.

¹¹⁵² *Op. cit.*, 3, 18.

¹¹⁵³ *Op. cit.*, 9 ff., 13, 19.

¹¹⁵⁴ *Grundzüge*, § 2.

¹¹⁵⁵ *Op. cit.*, § 5.

¹¹⁵⁶ *Über die Aufgabe*, 461-463.

summarize the basis of metaphysics or the entire scope of knowledge "in the developed basic concepts of number, space, matter, and consciousness".¹¹⁵⁷

The demand for an inductive metaphysics was also agreed to by philosophers who were otherwise by no means ready to abandon the path of a more or less free metaphysical speculation, yet on the other hand paid due tribute *volentes nolentes* to the spirit of the times and could thereby feel less vulnerable. We have already mentioned E. v. Hartmann and Lotze in this context; and we can furthermore point to the extreme example of Fechner, who supplemented induction with "analogy" and "reasonable combination" and also attributed no less cognitive value to the inner experience of the mind than to the outer experience of nature;¹¹⁵⁸ under these conditions, it was not particularly difficult to invent a kind of metaphysical mysticism with an appeal to induction and experience. Such a use of inductive metaphysics was, incidentally, by no means limited to the 19th century. "The time needs metaphysics",¹¹⁵⁹ opined Driesch with many others in 1924, and since he wanted to proceed inductively as a natural scientist, while on the other hand admitting his philosophical kinship with speculative thinkers like Schopenhauer or Bergson, he conceived induction so broadly that he could arrive at a dualistic world view, in the background of which, however, hovered an indefinite unity of everything with everything and on the basis of which, among other things, the problems of God and immortality found a new solution;¹¹⁶⁰ he expanded or loosened his concept of induction differently than Fechner, but in the same sense, i.e., through a special emphasis on the role of hypothesis in the inductive procedure and through the demarcation of science, which enabled a mere "non-ontological hypothetical metaphysics," against the mathematical type of certainty.¹¹⁶¹ Approximately at the same time, Becher opined that through an empirically-inductively proceeding metaphysics standing in close contact with the individual sciences, which was allowed to explore the supra-empirical only in connection with experience, he could ground the view that matter is of a psychic nature.¹¹⁶² A good half-century earlier, Littré had apparently warned in vain against striving for a "science idéale" that was to combine the positive method harmoniously with the old metaphysical results.¹¹⁶³

In its main tendency, however, inductive metaphysics served the concern of an approximation of philosophy and science to one another with the exclusion of empirically unprovable speculation. This attitude was grounded in the conviction that philosophy and science(s)

¹¹⁵⁷ Thus Engel, *System*, 180, 181.

¹¹⁵⁸ *Zend-Avesta*, xv.

¹¹⁵⁹ *Metaphysik*, 97.

¹¹⁶⁰ *Op. cit.*, 93.

¹¹⁶¹ *Op. cit.*, § 2, 17 f.

¹¹⁶² *Metaphysik*, esp. 350 f., 353, 388 f.

¹¹⁶³ *Préface*, 52 ff.

differed from one another neither in their method nor in their object, but merely in their degree of generality—a conviction which, for its part, restated the modern principles of the ontological homogeneity of the layers of Being and of the primacy of method. Now, however, the advocates of this intertwining of philosophy and science divided into those who did not want to allow any use of the term "metaphysics" in this context, and those who made use of this linguistic usage. This terminological opposition was not so accidental, for the latter showed themselves (partly because of their positive engagement with Kant) generally more inclined to evaluate the role of the hypothetical in science and the work of autonomous thought more highly; in this respect, they anticipated an important current of our contemporary epistemology and a linguistic usage common today.¹¹⁶⁴ The thought that philosophy and science had the same method and the same object was, in any case, first disseminated by those who assigned metaphysics by matter and name to an already overcome phase of human history, i.e., by the positivists. Littré, in whom emphatic formulations in this sense are found,¹¹⁶⁵ did not even want to allow metaphysics to pass as the science of the logical conditions of knowledge and the categories of thought; metaphysics, he wrote, had this task as long as it dominated philosophy, but now the investigation of such questions falls to the competence of positive science.¹¹⁶⁶ "Vulgar materialists" like Büchner were just as unwilling to recognize the scientific legitimacy of a form of thought that did not heed the proven procedure of the natural sciences, namely the observation of the sensible world and reasoning based on the comparison of sensible objects and relationships.¹¹⁶⁷ But even a "dialectical materialist" like Engels was of the conviction that the development of the sciences to the point where each of them became clear about its position in the total context of things and of knowledge made a special science about this total context or a philosophy standing above the other sciences superfluous; philosophy, insofar as it remains independent at all, then deals only with the laws of thought, i.e., with formal logic and dialectics.¹¹⁶⁸ Engels speaks explicitly here of "philosophy," but his arch-enemy Dühring, who used the word "metaphysics," had the same thing in mind, i.e., a purely logical discipline as a supplement to the individual sciences. His usage of the word constitutes no indication of a conciliatory disposition, but is to be understood as resigned adaptation to a real state of affairs and means to say: if one must speak of metaphysics at all, then it should at least be nothing other than logic. Dühring warns, incidentally, against the "metaphysical degeneration of natural conceptions" due to the false use of the "common logical functions" as well as against the

¹¹⁶⁴ See the last paragraphs of this section.

¹¹⁶⁵ *Préface*, 35, 52, 60 and *passim*.

¹¹⁶⁶ *Op. cit.*, 56.

¹¹⁶⁷ *Kraft*, 263.

¹¹⁶⁸ *Die Entwicklung des Sozialismus*, II = MEW, 19, 207.

remnants of metaphysics after the victory of "strict science" and "empirical thought"; such remnants are the concept of substance and the reification of the cause or the Ego.¹¹⁶⁹

Spencer shares the positivist basic position that philosophy is the extension, unification, and generalization of the results of the individual sciences; philosophical truths relate to the highest scientific truths exactly as these latter relate to the truths of the lower stages of scientific knowledge; philosophical knowledge thus differs not in its essence from scientific knowledge, but only in that its generalizations are universal, while those of science are partial.¹¹⁷⁰ Unlike the positivists, however, Spencer uses, albeit rather casually, the concept of metaphysics to designate the entire "theory of knowledge"; by this he understands not merely epistemology, but the total knowledge as coordination of objective science (or the theory about the known) with subjective science (or the theory about the knower).¹¹⁷¹ It can remain an open question here to what extent Spencer's tolerance towards the concept of metaphysics goes back to its epistemological use still common in England at that time—as we also encounter it in Mill¹¹⁷²—or on the contrary to his reservations against Mill's narrow empiricism and inductivism.¹¹⁷³ In Germany, at any rate, the advocates of inductive metaphysics represent a relatively open and flexible empiricism, and if they distance themselves from apriorism and deductivism, they nevertheless see more or less the indispensability of theoretical aids for the construction of a systematic whole, which often entails an ambivalence in their relationship to Kant. For Wundt, Kant is the one who indeed overthrew traditional metaphysics through critique of knowledge, but by his adherence to the application of apriori principles to empirical knowledge opened the door to idealist arbitrariness. Empirical reality can be derived neither from such principles nor from the transcendent ideas of reason of traditional metaphysics; this latter supplemented the given reality through such ideas to a unity satisfying to thought, but although its constructions occasionally promoted the development of the sciences, they nevertheless provided no explanation of the real. The striving for unity corresponds indeed to the drive for knowledge immanent in human reason, but so that this does not degenerate into fanaticism, it must be guided correctly; this happens when the supplementation of the real by ideas does not effect a qualitative change of the same as a result of its reduction to the supersensible, but consists merely in a quantitative continuation of the given. A distinction must be made between the real or quantitative and the imaginary or qualitative type of transcendence; inductive metaphysics determines the essence of Being and occurring only according to the measure of the series beginning in experience, whereby it "seeks to continue these series according to the lawfulness

¹¹⁶⁹ *Dialektik*, 72, 177, 185 ff.

¹¹⁷⁰ *First Principles*, § 37 = pp. 104, 103.

¹¹⁷¹ *Principles of Psychology*, § 385 = II, 307.

¹¹⁷² See above Note 121.

¹¹⁷³ See e.g. *Essays*, II, 216.

inherent in them beyond the limits of experience and to connect them into a whole".¹¹⁷⁴ Philosophy—composed of logic as investigation of the ways and aids of thought and metaphysics as investigation of the content of knowledge—should form a general science that proceeds methodically in the same way as the other sciences, yet achieves a higher degree of abstraction and generalization on their basis.¹¹⁷⁵ Precisely in this elevation beyond the experience accumulated and ordered in the sciences—albeit always in the line prescribed by experience—Wundt sees the specific feature of that which he wants to continue to call "metaphysics" despite solemn renunciation of traditional metaphysical speculation. Metaphysical principles like causality are indeed suggested by experience, but experience can never completely grasp reality in the infinity of its shapes and cases, and therefore something metaphysical (we could also say: hypothetical) always adheres to causality as a principle of world order.¹¹⁷⁶ Philosophy, however, does not make use of the metaphysical in this sense as the only one; also "in the individual sciences assumptions of a metaphysical character arise everywhere," "concepts and principles," which are then processed in the light of the general metaphysical concepts and principles of philosophy; this should bring not only "facts" but also "hypotheses" into harmony with one another and with the general principles of knowing and "complete [them] by means of further presuppositions" in order to arrive at the erection of a contradiction-free worldview.¹¹⁷⁷

The interaction of experience and hypothesis within the framework of inductive metaphysics is thematized more clearly by Erhardt, who in this context criticizes Kant for having erroneously identified the Non-Empirical and the Apriori-Valid with one another.¹¹⁷⁸ Such an identification suggests, for its part, the thought of the possibility of a deductive science or metaphysics, but deduction and scientific procedure exclude one another, the former can only be used as a form of presentation. The procedure of scientific metaphysics can therefore only be regressive-analytical, and to that extent philosophy possesses no special method that would distinguish it from all other sciences.¹¹⁷⁹ Precisely this methodological equation of philosophy and science now makes clear the extent to which scientific metaphysics requires the Non-Empirical after it has separated itself from the Apriori. For even the special sciences must set up hypotheses in order to advance, and thus exceed experience; all the more must metaphysics go beyond experience, especially since the latter conveys only a fragmentary

¹¹⁷⁴ *System*, I, 181 ff., 199 ff., 204 f.; II, 144.

¹¹⁷⁵ *Logik*, II, 674 ff.

¹¹⁷⁶ *Op. cit.*, I, 637. Cf. *Ethik*, I, 16: "metaphysical is every investigation that relates to the presuppositions about the nature of things not immediately accessible to experience".

¹¹⁷⁷ *System*, I, 28; *Logik*, I, 7 f., cf. II, 96 f.

¹¹⁷⁸ *Metaphysik*, 637.

¹¹⁷⁹ *Op. cit.*, 639 ff.

picture of reality and the former has the task of filling precisely these gaps.¹¹⁸⁰ Going beyond experience does not mean, of course, independence from it, but becomes necessary in the metaphysical endeavor "to explain the world of experience in context".¹¹⁸¹ Between the progress of the sciences and that of metaphysics, incidentally, a close relationship can be established, so that on the basis of the dynamics of this mutual and simultaneously unified progress even an (indirect) knowledge of the thing-in-itself can be held out in prospect.¹¹⁸²

From the same methodological equation of philosophy and science, Heymans derives the necessity of overcoming short-sighted empiricism and positivism. The general modern presuppositions of that equation become visible again when Heymans denies any ontological difference in status between the objects of knowledge and declares that not objects of knowledge, but only cognitions could be absolute or relative; scientific metaphysics investigates the same world as the individual empirical sciences, only in contrast to these it concerns itself with the whole available experience and wants to draw the "respective ultimate conclusions" from the knowledge of its time; such a metaphysics, unlike the traditional one, is no conceptual construction.¹¹⁸³ The method common to the sciences and metaphysics consists in the establishment of facts, in the discovery of the conditions or problems hidden therein, and finally in the endeavor to gain knowledge through hypothesis formation and verification of hypotheses.¹¹⁸⁴ This is Heymans' answer to the positivist demand for the elimination of any metaphysics. If one wanted to fulfill this demand and allow no metaphysics alongside the positive sciences, he opines, then for the same reason one would have had to exclude metaphysics *within* the positive sciences and forget much "that is usually taken over quite harmlessly into the presentation of empirical results"; positivism thus faces the alternative of either being able to explain nothing or else having to introduce metaphysical principles secretly and unconsciously.¹¹⁸⁵ Through this explicit delimitation against positivism, however, the question was sharpened as to how inductive metaphysics could go beyond the individual sciences without availing itself of an essentially different procedure. To this argument its representatives replied that inductive metaphysics is indeed also dependent on pure thought and pursues no empirical research itself, yet this thought is bound to the results of the sciences—and furthermore it works in metaphysics in the same way as in the sciences, to which the metaphysical assumptions contained in them testify.¹¹⁸⁶ A doctrine of the whole reality cannot be built up by mere summation of the results of the individual sciences, and even if the

¹¹⁸⁰ *Op. cit.*, 634 f., 638.

¹¹⁸¹ *Op. cit.*, 629.

¹¹⁸² *Op. cit.*, 631, 626, 628.

¹¹⁸³ *Einführung*, 14 f., 23, 26.

¹¹⁸⁴ *Op. cit.*, 20.

¹¹⁸⁵ *Op. cit.*, 208 f., 212 f.

¹¹⁸⁶ *Realisierung*, 192 f., 196.

assumptions of metaphysics could not always be proven, they nevertheless exerted a stimulating and promoting effect on the sciences.¹¹⁸⁷ However much such metaphysics may have an epistemological and gnoseological character, it ultimately constitutes a doctrine about the Real—and as such it differs from the traditional one in that it does not want to become the mere expression of "what we demand or wish for our peace of soul".¹¹⁸⁸

Similar thought motifs are found among the Anglo-Saxon pragmatists. The problem of the relationship between metaphysics and science appears in them, too, under two complementary aspects, i.e., on the one hand bad or traditional metaphysics is depicted as the methodical and substantive opposite of modern science, on the other hand the project of a new metaphysics is designed which is to orient itself by the modern scientific spirit and rest on the results of the empirical sciences. Philosophy has no method of its own, writes James, it must appropriate the methods of the sciences in order to serve as their supplement.¹¹⁸⁹ Metaphysical axioms such as the simplicity of nature, *nihil ex nihilo fit*, etc., are rationality postulates and not factual statements, yet they remain fruitful and stimulating for scientific research.¹¹⁹⁰ Since a certain metaphysics must exist anyway, good metaphysics would be better than "the trashy Metaphysics of vulgar Positivism"; as a search for the ultimate elements of things and as a demand of thought for its own inner consistency, metaphysics will always be indispensable.¹¹⁹¹ Good metaphysics will come about when the opposition between philosophy and science that has arisen in later times is abolished and their ancient unity is restored.¹¹⁹² The same juxtaposition of bad and good metaphysics stands in the center of Schiller's reflections. The former is bankrupt and constitutes at most a pleasant intellectual game, the latter does not yet exist and should be built up piecemeal, i.e., inductively and in close reliance on the sciences; although it will appear as the final synthesis of the sciences, it will retain the character of a hypothesis or a thought experiment; it cannot be more than "probable science".¹¹⁹³

It is obvious that the positive use of the concept of metaphysics on the part of vehement critics of metaphysics had to provoke partly misunderstandings, partly protests.¹¹⁹⁴ Dewey had to

¹¹⁸⁷ *Op. cit.*, 197, 196.

¹¹⁸⁸ *Op. cit.*, 198. More emphatically Schneider (*Gegenstand*, 210, 211): a scientific metaphysics, which has its domain in the sensibly given object of experience, is not a theory of science, but stands above it and deals with the processing of its object, i.e. with the fundamental facts that give experience its shape; accordingly, it has the task of showing that the Kingdom of God can be felt and believed, not known.

¹¹⁸⁹ *Some Problems of Philosophy*, Works, VII, 14, 19.

¹¹⁹⁰ *Principles*, 1263 f.

¹¹⁹¹ *The Sentiment of Rationality*, Works, V, 57. Cf. the (positive) use of the expression "metaphysical question" in *Essays in Radical Empiricism*, Works, III, 81, 87, 91 ff.

¹¹⁹² *Some Problems of Philosophy*, Works, VII, 19 f.

¹¹⁹³ *Studies*, 20 f.; *Human Truths*, 177 f.; *Riddles*, 148 f., 163 f.

¹¹⁹⁴ Cf. below Note 266 ff.

defend himself in his late years against this and asserted that for him metaphysics only has meaning on the ground of experience; he admitted, however, that his linguistic usage could lead astray.¹¹⁹⁵ Three decades earlier, he had indeed gone somewhat too far in his concessions to traditional terminology when he opined that the Aristotelian definition of metaphysics, insofar as it revolves not around theology but around first philosophy, is compatible with science, i.e., contains nothing that transcends the object of knowledge of science. As first philosophy, metaphysics investigates those irreducible features that are to be found in all existing beings regardless of their ontological nature.¹¹⁹⁶ The necessity of such metaphysics leaps to the eye when one establishes that the scientistically minded enemies of any metaphysics drag along "a large assortment of uncriticized metaphysics" with them.¹¹⁹⁷ If, on the other hand, science frees itself from its fear of metaphysics, it can tackle ontological and logical questions much better.¹¹⁹⁸

Against the project of an inductive metaphysics, objections were raised in the time around 1900 primarily from two sides: from Neo-Kantians, who allowed positive talk of metaphysics only in connection with the practical postulates of reason and otherwise reserved for philosophy the role of a theory of knowledge (of science), and from metaphysicians who assumed an essential difference between metaphysics and science. A prominent natural scientist like Helmholtz, who spoke up as early as 1874, paved the way for the Neo-Kantian position insofar as he distinguished not between good and bad metaphysics, but between good philosophy and (anyway bad) metaphysics. He traced the progress of the natural sciences back to the enforcement of the inductive method in the struggle against the last great systems of "philosophical speculation," he rejected the "supposed science of metaphysics," which wanted to recognize the last principles of Being through pure thought, and assigned to healthy philosophy the task of illuminating the work of the human faculty of knowledge and thus the instruments and prerequisites of knowledge.¹¹⁹⁹ Riehl, too, standing somewhere between positivism and Neo-Kantianism, considered progress in philosophy possible only through the final overcoming of post-Kantian speculative constructions, which he designated as "system poems," "artworks of thought," and "opiates for the understanding"; one could, he opined, "let the lot decide on the choice of a metaphysical hypothesis instead of inclination or taste".¹²⁰⁰ In agreement with more orthodox positivists, he reproaches Kant for not having clearly enough grasped the far-reaching consequences of his own refutation of the ontological proof of God and for having aimed, despite all well-founded criticism of traditional metaphysics, at a new one that would exclude

¹¹⁹⁵ *A Comment*, 712 f.

¹¹⁹⁶ Art. 'Metaphysics' (*Cyclopedia of Education*, 1912-1913), MW, VII, 277; *The Subject-Matter of Metaphysical Enquiry*, MW, VIII, 4, 6 f.; *Experience and Nature*, LW, I, 308. Cf. Notes 120 and 243 in this chapter.

¹¹⁹⁷ *Review of H. Elliot, Modern Science and the Illusions of Professor Bergson* (1912), MW, VII, 135 f.

¹¹⁹⁸ *The Present Position of Logical Theory*, EW, III, 141.

¹¹⁹⁹ *Über das Streben nach Popularisierung der Wissenschaft*, *Vorträge*, II, 362 f.; cf. I, 124 f.

¹²⁰⁰ *Kritizismus*, II, 12, 86.

experience from the foundation of natural science and morality.¹²⁰¹ Riehl now directs his attention not to finding an (inductive) way to reconcile metaphysics and science, but to the sharp conceptual elaboration of their essential differences. Subjectively seen, both are rooted in the striving for unity of thought, but metaphysics postulates unity and deduces the particular from the general, whereas science asserts unity only to the extent that it is able to find it in the phenomena—otherwise it considers it a mere maxim. Demonstration not on the basis of conceptual considerations, but through recourse to appearances, thus empirical verification of one's own hypotheses, constitutes the actual characteristic of science in contrast to metaphysics, whose hypotheses are unverifiable and whose abstraction from appearances brings to light not the principles of things but only the thought principles of the metaphysicians concerned.¹²⁰² While the logical abstraction used by philosophers arises through elimination of features of more special concepts, the more general concepts in mathematics and science are at the same time richer in content.¹²⁰³ In the same sense, scientific deduction differs from the philosophical: while the former comprises three empirically verifiable cases (application of a natural law to a special case, derivation of a new general fact from a known law, determination of the behavior of a phenomenon on the basis of the combination of known laws), the latter is merely syllogistic.¹²⁰⁴ Metaphysically stamped philosophy must proceed deductively-syllogistically, however, because it places the thought of the system in the foreground and thereby comes into conflict with the open and dynamic character of scientific research.¹²⁰⁵

If one wants to see metaphysics from the viewpoint of its opposition to science, one must say with Riehl that inductive metaphysics is impossible and that on the basis of the inductive method arguably only inductive, no speculative results could be achieved; a hypothetical and merely relative metaphysics is none at all.¹²⁰⁶ What remains now if there can be no scientific metaphysics and if scientific philosophy wants to maintain itself in opposition to metaphysics and at the same time preserve its own independence? It should become "the science and critique of knowledge," "teach to know not the sciences, but science".¹²⁰⁷ In terminological respects, it is nevertheless noteworthy that Riehl himself—albeit rather casually—speaks of metaphysics precisely in the sense of the "science of the principles of knowledge" and notes the presence of

¹²⁰¹ *Op. cit.*, 88 ff.

¹²⁰² *Op. cit.*, 108, 98 ff., 85, 97 f.

¹²⁰³ *Op. cit.*, 109; cf. Bakunin, *Philos. Betrachtungen über das Gottesphantom*, GW, I, 267: "the scientifically general differs from the general of metaphysics and theology precisely in that it is not built, like them, on the abstraction of all details, but on the contrary and solely through the coordination of details."

¹²⁰⁴ *Op. cit.*, 115 f.

¹²⁰⁵ *Über wissenschaftliche und nichtwiss. Philos., Studien*, 228 ff.

¹²⁰⁶ *Kritizismus*, II, 84 f.

¹²⁰⁷ *Op. cit.*, I, 1; II, 17, 16.

such metaphysics in every science;¹²⁰⁸ as "theory of the limit concepts of experience," metaphysics may strictly assume only a critical or negative function.¹²⁰⁹ Windelband also uses marginally the expression "metaphysics of knowledge" (in contrast to the "metaphysics of things") to designate that philosophy which, on the basis of its demarcation against traditional metaphysics as well as its denial of being absorbed into the sciences, becomes the theory and self-knowledge of science.¹²¹⁰ Despite these occasional concessions to the linguistic usage of other directions or rather despite their (free) re-linking to Kant's epistemological use of the concept of metaphysics, Neo-Kantians held fundamentally to their negative assessment of the attempt to build up a scientific metaphysics as the crowning of the individual sciences. Adickes even called this attempt a "moderate dogmatism" and reminded in the Kantian spirit that metaphysics can only have a practical, not a scientific character.¹²¹¹ Metaphysics must not base itself on science because no element of the latter is suitable for the Absolute: appearances are relative and laws are bound to our thought mechanisms. An idea of the Absolute that would be founded on ideal processings of sensory perceptions would be built on the relative and therefore a contradiction in itself. The Absolute must therefore be sought not in the object, but only in the subject, specifically in its moral will; here metaphysics has to find its object and its task, since it shares with science neither the area nor the procedure nor the goal.¹²¹²

Metaphysicians emphasized the opposition between metaphysics and science with particular emphasis in order to take the project of an inductive metaphysics under fire from their view and for their own purposes. They denied not only that the sciences could overcome their substantive and methodological differences from one another and form a logically closed unity, but also that the scientific mode of thought was the only possible or correct one.¹²¹³ According to Bergson, metaphysics has a specific object, i.e., the spirit, and a specific method, i.e., intuition.¹²¹⁴ While scientific analysis recognizes the immutable and immobile, metaphysical intuition refers to the variable, thus the experienced and concrete; to the extent that the original character of

¹²⁰⁸ *Op. cit.*, III, 5.

¹²⁰⁹ *Über wiss. u. nichtwiss. Philos., Studien*, 249.

¹²¹⁰ *Präludien*, 42; cf. 25 ff.

¹²¹¹ *Zukunft*, 286 f., 251.

¹²¹² Liard, *Wissenschaft u. Metaphysik*, 354, 254, 352. Cf. below Abschn. 4d. The positive use of the concept of metaphysics diminishes in general when one wants to emphasize, like Cornelius, that the metaphysical phase in the history of philosophy has been finally superseded by the epistemological one. The decisive characteristic of metaphysics consists for Cornelius in the fact that here imagination steps in to close the gaps of empirical knowledge (*Einleitung*, 47 f.).

¹²¹³ See e.g. Boutroux, *Du rapport*, 158 f. (*la raison n'est pas la science*), cf. 154, 160. The object of metaphysics is for Boutroux the self-analysis of reason in its relation to truth and being; otherwise philosophy has the task of clarifying the methods of the sciences and of researching the human world of art, morality and religion (*op. cit.*, 167).

¹²¹⁴ *La Pensée (Introduction II)*, 42.

movement becomes conscious against the optical illusions of the intellect attached to the statics of things, metaphysics proves to be the organ for the absolute grasping (and not merely for the relative knowledge) of a reality beyond any linguistic formulation or symbolic representation; metaphysics admittedly also requires concepts, but it is "proprement elle-même" when it leaves them behind.¹²¹⁵ Bergson concedes that metaphysics and science have the same value and the same "dignité," which is why they can also complement and correct each other or communicate with each other within experience.¹²¹⁶ Regardless of the wish or the real possibility of a closer connection of metaphysics and science with one another within the framework of an intuitive philosophy, however, no metaphysics as a summary or synthesis of scientific results comes into question; metaphysics is not a generalization of experience, but an integral experience.¹²¹⁷

Scheler, who did not want to be an intuitionist, highlighted with equal emphasis the irreconcilable opposition between the "metaphysical knowledge technique" and the "positive scientific cognition technique,"¹²¹⁸ which was for him simultaneously an opposition of the object and the intention. It is the business of metaphysics to recognize the Being of things and the immutable essential structure of the world as a totality; metaphysics is the "venture of reason to push forward into the absolutely real, which in its unconditionality requires no other real for its existence and is not conditioned by the psychophysical organization of man".¹²¹⁹ As real knowledge (*Realerkenntnis*), metaphysics can limit itself neither to the knowledge of existence-free ideas in the manner of Husserl nor to the contents of consciousness or to validity—and value-knowledge in the manner of the Neo-Kantians; just as little can it be reduced to epistemology and make its own truth content dependent on the results of the theory of knowledge.¹²²⁰ Finally, Scheler rejects both aprioristic constructions and inductive metaphysics as mere quantitative extension of positive "reality positings" (*Realitätssetzungen*), especially since metaphysics is "essentially personal and individual, also national and cultural-circle-like" conditioned and cannot be operated in the sign of scientism, division of labor, progress, and internationalism.¹²²¹ For Scheler, this attitude does not mean a hostile demarcation of metaphysics against science. Essential insights regarding the structural form of the world are supreme prerequisites for the positive sciences—and for philosophical

¹²¹⁵ *Introduction à la Métaphysique, La Pensée*, 228, 231, 232, 206, 213.

¹²¹⁶ *La Pensée (Introduction II)*, 50, 52 f., 54.

¹²¹⁷ *Introd. à la Mét., La Pensée*, 244, 255.

¹²¹⁸ *Die Wissensformen...*, GW, VIII, 188.

¹²¹⁹ *Erkenntnis und Arbeit*, GW, VIII, 219; *Die Wissensformen...*, VIII, 87; *Weltanschauungslehre*, GW, XI, 11. As sociologist of knowledge Scheler notes that the results of metaphysics remain permanently hypothetical and are "valid" only for those who feel their own essence to be spiritually solidary with the essence of the metaphysician; metaphysics is "an absolute and yet only individually valid knowledge at the same time" (*Die Wissensformen...*, GW, VIII, 87, 154).

¹²²⁰ *Weltanschauungslehre*, GW, XI, 11, 18, 19.

¹²²¹ *Op. cit.*, 45 f.; *Die Wissensformen...*, GW, VIII, 168.

metaphysics "windows into the Absolute," for only the knowledge of material data can pave the way for a knowledge that is independent of the accident of sensory experience.¹²²² Every field of knowledge has its "meta"-problems and requires a "metascience"; the metasciences, however, form only connecting bridges between the positive individual sciences and the supreme part of metaphysics; the "metaphysics of the first order," which treats the basic questions of the positive sciences (e.g., the questions about the essence of life or matter), can neither support nor replace the "metaphysics of the second order," i.e., the metaphysics of the Absolute.¹²²³ For metaphysics rests not only on the respective state of the sciences, but also on the natural worldview and the aprioristic knowledge of philosophical eidology. While the former is changeable and lends the respective metaphysics a hypothetical character, the two latter factors are stable and attainable at every stage of development, especially since—as Dilthey showed—there is only a limited number of metaphysical system types.¹²²⁴ As linkage of aprioristic synthetic essential knowledge with the results of science, metaphysics changes according to the growth of these latter, but not only because of that; equally, metaphysical thought remains in motion as a result of the dispute between the various metaphysicses, a dispute which "is never to be settled in the same sense and with the same methods as the positive-scientific dispute".¹²²⁵

Finally, there were voices that inferred the impossibility of an inductive or scientific metaphysics from the substantive and methodological heterogeneity of the sciences. Thus natural and human sciences would have to yield different "structural ontics" as possible bases of inductive metaphysics, apart from the fact that these structural ontics were also contradictory in themselves; metaphysics could therefore only work independently and according to its own methods.¹²²⁶ Despite the reservations of positivists, Neo-Kantians, and metaphysicians, the use of the concept of metaphysics in the sense of a purely immanent and (as the majority wanted) closely cooperating metaphysics with the sciences continued undiminished in the 19th and 20th centuries. In the remainder of this section, we will now examine the broad palette of this linguistic usage together with the substantive prerequisites belonging to it, which are partly epistemological and partly logical, partly ontological and partly gnoseological in nature. In all these cases, the assumption of the possibility of a "good" metaphysics goes hand in hand with the rejection of the "bad" traditional metaphysics of transcendence. Thus Husserl writes that his phenomenology "excludes only every naive metaphysics operating with absurd things in themselves, but not metaphysics in general," since it by no means wants to halt before the

¹²²² *Die Stellung des Menschen...*, GW, IX, 41, 251.

¹²²³ *Weltanschauungslehre*, GW, XI, 12, cf. 50 f.; *Philos. Weltanschauung*, GW, IX, 81.

¹²²⁴ *Weltanschauungslehre*, GW, XI, 20 f.; *Vom Ewigen...*, GW, V, 292.

¹²²⁵ *Die Wissensformen...*, GW, VIII, 85 f.

¹²²⁶ Geiger, *Wirklichkeit*, esp. 76 ff., 179.

highest and last questions.¹²²⁷ The last insights into Being are thus to continue to be called "metaphysical," but by this the original sense of metaphysics as first philosophy is no longer meant. For the "purely intuitive, concrete and moreover apodictic mode of demonstration of phenomenology" excludes "metaphysical adventures" and "speculative exuberances" by not articulating itself as a universal deductive theory, "as if all beings stood in the unity of a calculation," but as a system of phenomenological disciplines on the basis of a universal self-reflection.¹²²⁸ The abstraction of dogmatic metaphysics is to be sublated by a "truly concrete knowledge," as is the knowledge of transcendental subjectivity constructing all types of the positive. With the old uncritical intertwining of metaphysical and epistemological questioning it is not done; one must know what epistemology actually means, and also that without such, no metaphysics as universal science of the supreme grounds of Being is possible.¹²²⁹ Only epistemological reflection brings about the separation between natural science and philosophy, and from the critique of natural knowledge grows in turn the "science of Being in the absolute sense".¹²³⁰

By raising the demand for an epistemological foundation of metaphysics, Husserl feels himself to be the continuator and completer of the great modern turn from dogmatic metaphysics to "immanent philosophy." Descartes opened the modern age by viewing the "access to the immanent sphere" as the "absolute ground of all knowledge justification," while Kant's critique of reason signified "the philosophical revolution prefigured in the historically evolving philosophy of the modern age and finally becoming fact." Descartes' failure, however, made possible the resurrection of dogmatic metaphysics, and Kant's approach, too, is to be partly modified, partly deepened.¹²³¹ In any case, after these magnificent achievements, it is established that the specifically "modern difficulties" in philosophy do not revolve around a "mythical Being," but around "the essential relationship of beings in general and subjectivity in general, for which it is"; this insight leads "to the only rational problems of constitution," i.e., it displaces the problematic of Being *in abstracto* and poses the question of the "world for us".¹²³² This "for

¹²²⁷ *Cartesianische Meditationen*, § 64 = *Ha*, I, 182.

¹²²⁸ *Op. cit.*, §§ 60, 64 = *Ha*, I, 166, 182.

¹²²⁹ *Erste Philosophie*, Part 1 = *Ha*, VII, 184, cf. 193 f.

¹²³⁰ *Die Idee der Phänom.*, I = *Ha*, II, 23, cf. 3, 32.

¹²³¹ *Philosophie als strenge Wissenschaft*, *Ha*, XXV, 6 f.; *Erste Philosophie*, Part 1 = *Ha*, VII, 182, 183, 284 ff. (on Descartes' theoretical weaknesses 58 ff.); on Husserl's revision of the Kantian approach see Kern, *Husserl*, esp. 68 ff.

¹²³² Thus Husserl in his handwritten notes to Heidegger's Kant-book, cited in Kern, *Husserl*, 188 f. On the concern to make phenomenology fruitful for the question of being, see the plea by Fink (*L'Analyse*, 78 ff.), who however acknowledges that phenomenology knew itself from the beginning to be in opposition to the tradition of speculative metaphysics and "stood on the ground of the modern transformation of metaphysics" (*op. cit.*, 56, 60, 72). Against the interpretation of Husserl in the interest of a new metaphysics see Seebohm, *Bedingungen*, esp. 163 f.

us" must not, however, be understood in the merely psychological sense, and therein Husserl wants to see the essential difference of his metaphysical approach from others who likewise wanted to ground an immanent metaphysics on an epistemological path.¹²³³ Phenomenology is to effect a "principal reshaping" of psychology, whereby this latter transforms largely into aprioristic and purely intentional psychology and becomes philosophically usable on the basis of the overcoming of the natural attitude in favor of the transcendental, in order then to integrate itself into a "transcendental metaphysics".¹²³⁴ In contrast to the Absolute of traditional metaphysics, the Absolute of phenomenological metaphysics is the absolutely given,¹²³⁵ the first Being "preceding every worldly objectivity and bearing it," i.e., transcendental subjectivity as "the universe of monads communalizing itself in various forms"—or, in other words, "my apodictically given ego," of which it had to be established in the progress of phenomenological research that it can be world-experiencing ego *a priori* only "by being in community with others of its kind".¹²³⁶ This metaphysics, which deals with absolute (inter)subjectivity constituting all possible Being, must be distinguished from "universal ontology" and the "special ontologies," in which the Being of the world becomes the theme, although the elaboration of such ontology/ontologies—incidentally on the basis of what the rational and empirical sciences have to report about the *onta*—must in turn refer to world-constituting subjectivity.¹²³⁷

Husserl solved the problem of the relationships between science and philosophy or phenomenology, which was burning in his time, in favor of the latter by granting it both a specific method, i.e., the eidetic, and the competence of foundational research. Precisely for this reason, (phenomenological) metaphysics stands higher for him than ontology, which is connected with the sciences, although it too is absorbed neither methodologically nor substantively in them. In neither of these two points has Husserl's attitude become authoritative; rather, it exists alongside many others within a spectrum difficult to survey in its diversity. For intuition or eidetic method were only in demand at a time and with certain authors who wanted to defend themselves much more strongly than other times and authors against "scientism"; in correspondingly narrow limits kept the playing off of philosophical metaphysics against scientific ontology, while on the contrary the tendency strengthened to

¹²³³ See e.g. Dieterich, *Grundzüge*, § 2: Metaphysics investigates the question: "what can be real at all?" "solely and alone through reflection on the inner psychological laws of human knowing".

¹²³⁴ *Cartesianische Meditationen*, § 61 = *Ha*, I, 170 f.

¹²³⁵ "Absolute givenness is an ultimate", *Die Idee der Phänom.*, IV = *Ha*, II, 61.

¹²³⁶ *Cartesianische Meditationen*, §§ 64, 60 = *Ha*, I, 182, 166.

¹²³⁷ *Erste Philosophie*, Part 2 = *Ha*, VIII, 224, 225; *Ideen zu einer reinen Phänom.*, §§ 18 ff. and Appendix I, § 6 = *Ha*, V, 76 ff., 128 ff.

identify metaphysics primarily with ontology, but also with logic.¹²³⁸ Here the boundaries between ontological and logical conception of metaphysics are usually fluid, and for a reason that lies in the nature of the thing: *scientia universalis* and *ontologia generalis* have always been closely bound to one another in the philosophical tradition.¹²³⁹ With Peirce, this oscillating thought complex takes the form of an attempt to subject metaphysics to logic, whereby (good) metaphysics is understood as ontology in close reliance on science and is sharply contrasted with the (bad) traditional metaphysics of transcendence. To the extent that the latter deals with God, freedom, and immortality, it remains a matter of instinct, and for the direction it has taken, its influence by theologians is more responsible than the fact in itself that it has to do with abstract or unobservable things: for mathematics is even more abstract, and physics likewise talks of things such as energy that elude observation; in any case, transcendence metaphysics, in contrast to science, is unworldly, tautological, and sterile; it can provide man no help in striving for the deciphering and domination of nature.¹²⁴⁰ The opposition between "psychical or religious metaphysics" and "physical metaphysics" has therefore not sharpened by chance.¹²⁴¹ As ontology, "physical metaphysics" poses questions about the nature of reality, natural laws, necessity and contingency, etc.¹²⁴² Metaphysics should, in other words, explain "the whole universe of being" and for this purpose make use of a procedure that is very similar to that of physics—with an important difference: metaphysics indeed treats quite special areas of physics in which its "metaphysical postulates" are investigated, but no special observation instruments are used in the process; in its exploration of "matters of fact," metaphysics thus resorts to no technical means, but only to everyday experience, without therefore ceasing to be "observational science" applying its general methods.¹²⁴³

Precisely the preoccupation of metaphysics with what is real or reality separates it now from logic, which has to do with the true because truth and error are characteristics of propositions.

¹²³⁸ Given the frequent identification of (immanent) metaphysics and ontology in the philosophical literature of the 19th and 20th centuries, the overall situation cannot be satisfactorily grasped solely on the basis of the distinction between (traditional) metaphysics of transcendence and axiomatic metaphysics (meaning primarily the reduction of metaphysics to logic) (see the distinction in Krampf, *Metaphysik*, 10; Risse, *Metaphysik*, 12, distinguishes similarly, although he does not identify the concept of traditional metaphysics as knowledge of essence with the metaphysics of transcendence). As the analysis of this section will show, a multi-part distinction is more expedient here, which opposes transcendence metaphysics to an immanence metaphysics (in the sense of an ontology based on empirical concepts), a metaphysics of the a priori foundations of the sciences, and finally a conjecture metaphysics (in the sense of super-empirical hypotheses useful for scientific purposes), see Stegmüller, *Metaphysik*, 151 ff.

¹²³⁹ See the good remarks by Martin, *Metaphysics*, 229.

¹²⁴⁰ See 5.496 (cf. 6.6), 6.2-3, 8.118 (cf. 5.499), 6.491.

¹²⁴¹ See 1.192.

¹²⁴² See 5.496 and cf. 5.423, where Peirce speaks disparagingly of "ontological metaphysics" in the sense of the tradition, but at the same time wants to retain the "precious essence" of it.

¹²⁴³ See 6.214, 1.284, 1.129, 8.167, 8.110, 6.5.

Logical and metaphysical truth are thus two different things, for logic is normative science, whose strongly mathematical character implies, incidentally, the thought that metaphysics would differ from mathematics no less than from logic.¹²⁴⁴ These statements could create the impression as if logic and metaphysics went separate ways without ever being able to meet. In fact, their linkage with one another is achieved on the basis of a conviction reminiscent of that scholastic realism whose positive assessment according to Peirce separates the genuine pragmatist from the narrow-minded positivist.¹²⁴⁵ Metaphysics is the science of reality, but reality means regularity or active lawfulness, whose essence consists in "efficient reasonableness".¹²⁴⁶ In reality thus conceived, logical principles apply not merely in the regulative sense, but they represent veritable "truths of being".¹²⁴⁷ And just as logic reaches into reality, so too metaphysics as ontology reaches into logic by thematizing, besides Being, also the predications of Being, namely our use of categories; in this sense Peirce defines metaphysics also as "thoughts about words or thoughts about thoughts".¹²⁴⁸ Against the background of this logicization of reality, whereby the latter differs from mere existence, and this essentialization of logic, the initially sharp dividing line between truth and reality or logic and ontology liquefies, and Peirce can raise his demand for the grounding of metaphysics by logic. Metaphysics without logical foundation is a senseless undertaking, while a metaphysical foundation of logic appears downright crazy.¹²⁴⁹ The decision to make our logic our metaphysics rests, incidentally, on the genetic finding that metaphysical concepts were originally formal-logical and could therefore only be understood in the light of formal logic; similarly meant are remarks about the original dependence of metaphysical thought on the mathematical.¹²⁵⁰

The thought constellation appears differently with Meinong. Here it is not so much a matter of subjecting metaphysics to normative science, but rather of emphasizing the essential difference between object theory (*Gegenstandstheorie*) as science of the Rational and metaphysics as science of the Empirical, whereby the realm of object theory is much broader than that of metaphysics; the philosophical hierarchy turns out accordingly. The greater universality of object theory lies in the fact that it investigates all objects, i.e., everything that can be the object of a mental act; it investigates namely everything subsisting (*Bestehende*), while metaphysics must limit itself to the existing (*Existierende*). Everything existing indeed subsists, but not everything subsisting exists; therefore there are things outside the psychical and physical—just as there is knowledge of the non-real—and therefore the totality of the existing is infinitely small in comparison to the

¹²⁴⁴ See 5.565 (cf. 8.110), 5.569, 2.541, 4.240, 8.360.

¹²⁴⁵ See 5.423.

¹²⁴⁶ See 5.121.

¹²⁴⁷ See 1.487.

¹²⁴⁸ See 5.294; cf. Bosco, *Peirce and Metaphysics*, 348, 349 f.

¹²⁴⁹ See 2.36, 2.168, 1.624, cf. 3.454.

¹²⁵⁰ See 7.579-580, 1.625, 1.130, 1.400, 6.30.

totality of objects of knowledge; by not allowing the barrier of the Real to apply to itself, object theory opens up questionings that are even more general than the metaphysical ones.¹²⁵¹ The definition of metaphysics as science of the Real or Existing is intended to ensure its viability, but a prerequisite for this remains with Meinong, too, its consistent detachment from traditional metaphysics, which erroneously wanted to be a science of Being (*Sein*) and not merely one of beings (*Seienden*).¹²⁵² Not only the object, also the method of metaphysics must now change: to the extent that the apriori knowledge of objects from their nature falls to object theory, metaphysics occupies itself exclusively with what is to be determined about objects *a posteriori*. It is an empirical science, and without closest ties to experience it cannot exist as scientific metaphysics; the representatives of the sciences should even be allowed to "have a decisive word" in questions like teleology, evolution, or monism.¹²⁵³ All this does not mean, of course, that object theory and metaphysics or Rational and Empirical had nothing to do with one another; the law of causality, valid only apriori, which is at the same time the basic principle of all metaphysics, forms in itself an illustrative example for the inevitable "reaching of the Rational into the Empirical".¹²⁵⁴

Scholz placed the Rational above the Empirical just like Peirce or Meinong, in contrast to them, however, he connected the concept of metaphysics exclusively with the former by reducing it to mathematics and logic; the essential difference in nomenclature can, however, only partially conceal the not inconsiderable similarity in thought structure. For Scholz there are two main forms of philosophizing. Transcendental philosophy or metaphysics deals with possible worlds and has already reached the status of rigorous science, for it can be conceived as a "new logic" and is "mathematizable in a sense that is even essentially more mathematical than mathematics." Real philosophy (*Realphilosophie*), on the other hand, has to do with the real world, which is not capable of a purely rational grasping, which is why real philosophers easily fall victim to irrational subjective inclinations. Since logicized or mathematized metaphysics intellectually masters the totality of possible worlds, it can also explain the real world on the basis of its universal truths; in view of the distance between Rational and Empirical, however, it must lack the proximity to the present of real philosophy, so that it can say about the real world only what also applies to every possible world.¹²⁵⁵ This explanation by Scholz reveals the Achilles heel of the attempt to eradicate *ontologia generalis* and make of metaphysics merely a *scientia universalis*: the axioms of such a metaphysics must be conceived so broadly and applied to such different realities that they no longer have a specific sense; therefore it seems more

¹²⁵¹ *Über Gegenstandstheorie*, §§ 11, 2 = GA, II, 519, 517, 486.

¹²⁵² *Über die Stellung der Gegenstandstheorie...*, 1 = GA, V, 229.

¹²⁵³ *Über Gegenstandstheorie*, § 11 = GA, II, 520 f.; *Über philos. Wissenschaft...*, 1 = GA, V, 21 ff.

¹²⁵⁴ *Selbstdarstellung*, GA, VII, 48.

¹²⁵⁵ *Metaphysik*, 158 ff., 174 ff., 182, 184.

sensible to set up regional systems of principles that find their application in respective specific areas of Being.¹²⁵⁶ Already against the preference of traditional metaphysics for the Necessary and the Whole, it had been proposed instead to start from the idea of the special ontological field, which exists alongside others and is to be explored by the respectively suitable method; metaphysics would then be the name for the exploration of the structure of the field and the relations that enable its constitution.¹²⁵⁷

With Whitehead, neither a mathematization of metaphysics nor a fragmentation of the same into partial ontologies takes place, but the attempt at a unified and at the same time open conception, which methodologically would be attached neither to the mathematical nor to the inductive procedure. Although Whitehead rejects dogmatic deductionism and its disguise as the application of mathematical method to philosophy, although he also registers the failure of speculative philosophy and expresses his doubts (not about knowability, but) about the direct and theoretically directly usable grasping of first metaphysical principles, he nevertheless persists in the project of a "gradual elaboration of categorical schemes" and an asymptotic approximation to a system of principles that is initially designed as an ideal; metaphysical statements are thus for him not dogmatic findings about the indubitably Known, but "tentative formulations of the ultimate generalities."¹²⁵⁸ Recourse to inductivism with the aim of a tentative formulation of the General is impossible for two reasons: first, a complete and clear conceptual analysis of immediate experience cannot be achieved, and second, there are no facts that would exist independently of an interpretation, i.e., of a whole system of propositions; for the analysis of every proposition or every single fact refers finally to the general character of the universe and thus requires a metaphysical foundation.¹²⁵⁹ On the other hand, the statement of the inadequacy of empiricism does not mean that metaphysics may lose sight of experience. It consists precisely in the endeavor to connect the behavior of things with their formal nature or, in other words, to find out the generalities that can be applied to all details of experience; the general principles of physics could serve here as a specific exemplification of what one might expect from metaphysics.¹²⁶⁰ Despite all insight into the necessarily approximative character of metaphysical aspirations and at the same time into the limits of rationalistic claims, science and metaphysics cannot completely forego the belief of rationalism that all elements of experience could be explained as examples or illustrations of a single general theory. Adherence to this belief despite many failures is grounded, however, in a moral conviction about the character of

¹²⁵⁶ So Martin, *Metaphysics*, 229 f.

¹²⁵⁷ See e.g. Abbagnano, *Expérience*, 39.

¹²⁵⁸ *Process*, 3, 4, 8.

¹²⁵⁹ *Op. cit.*, 4, 11, 14.

¹²⁶⁰ *Op. cit.*, 94, 13, 116.

intellectual enterprises—a conviction that connects metaphysics and religion with one another.¹²⁶¹

The equation of metaphysics and ontology became increasingly common since Whitehead's time. Even philosophers who continued to grant metaphysics the right to exist as theology or philosophy of the Absolute opined that this formed henceforth a "final or marginal area" of metaphysics, which was not decisive for its fate; modern metaphysics should constitute a reality doctrine or ontology in closest connection with the individual reality sciences and at the same time reflect on their principles.¹²⁶² Some tried to base their own definition of metaphysics as science of the traits common to all beings or of the existing as existing on the Aristotelian idea of a first philosophy, whereby they emphasized that metaphysics understood in this way had nothing to do with theology, since it assumed no "true" reality beyond appearances and furthermore proceeded empirically and analytically.¹²⁶³ The general modern or already long since banal background of such determination of the tasks of metaphysics becomes even clearer when it is said that modern metaphysics, in contrast to the traditional one, which out of fear of the transitory and death concentrated on the thought of an Absolute, should dedicate itself to Becoming and the Relative, and explore their nature or the constant magnitudes in them, which could not be (completely) grasped by the individual sciences.¹²⁶⁴ Quine also understands ontology as a continuation and extension of science, insofar as it wants to give an answer to the question: "what is or exists?". Already within natural science there is a continuum of gradually structured statements, starting from reports on observations and reaching to reflection on fundamental theoretical questions; ontological and logico-mathematical statements form a seamless continuation of this continuum and move thereby even further away from experience than the fundamental principles of scientific theories, although the differences between these two levels remain only gradual: for "science is a unified structure."¹²⁶⁵ As another modern author formulates it, metaphysics defined as ontology proceeds neither speculatively, nor at the same time experimentally, and it aims at a general understanding of the fundamental constitution and structure of the world or of that which exists or is.¹²⁶⁶ The linguistic usage can, however, also vary here.¹²⁶⁷

¹²⁶¹ *Op. cit.*, 42.

¹²⁶² Heimsoeth, *Der Streit*.

¹²⁶³ Randall, *Metaphysics*, esp. 404-407; cf. above Notes 176, 120.

¹²⁶⁴ Hartshorne, *Present Prospects*, 189, 191, 192.

¹²⁶⁵ *Ways of Paradox*, 127, 134.

¹²⁶⁶ O'Connor, *Metaphysics of Moore*, 1.

¹²⁶⁷ So Feiblemann defines ontology as the theory or system of being and metaphysics as the criticism of ontology. In the critical construction of an ontology that would contain the minimal assumptions or presuppositions for any other thought effort, metaphysics collects and systematizes knowledge from all possible sources (*Foundations*, 3, 9, 11).

The old intertwining of *ontologia generalis* and *scientia universalis* had the effect in our time that alongside the determination of metaphysics as ontology and parallel to, but independent of its determination as logic, the establishment of a comprehensive doctrine of categories was declared the main task of metaphysical thought effort. Empiricists too advocated a metaphysics so understood in the conviction that the testing of categories or *summa genera* by experience and facts would guarantee the validity of the results.¹²⁶⁸ "Immanent metaphysics" can accordingly pursue the old goal of designing a general worldview by rational means, and it achieves it if it arranges the basic classes of things in the form of a logically coherent hierarchy using appropriate (epistemo)logical criteria and means.¹²⁶⁹ In this case, the author wants to continue calling his metaphysical enterprise "ontology," other authors however disregard the ontological aspect completely and commission their metaphysics exclusively with logical tasks. As "pure philosophy" or "epistemology," metaphysics investigates the logical relationships between propositions, the (logical) nature of knowledge, truth, and forms of argumentation as well as the manner in which propositions of a certain type are proven by propositions of higher logical status; as such aprioristic, albeit not deductive logical investigation, metaphysics has nothing to say about the world and man.¹²⁷⁰ A closer leaning on the ontological questioning, but with simultaneous integration of the same into the logical and epistemological frame of reference, characterizes Strawson's idea of a "descriptive metaphysics," which is intended to reveal the most general structural features of our concepts. According to this view, there are categories and concepts that do not change in their essential character and underlie every thought, the philosophical as well as the non-philosophical.¹²⁷¹ In this context, finally, scattered attempts are

¹²⁶⁸ See e.g. Mundle, *Critique*, esp. 271, 273.

¹²⁶⁹ Quinton, 235, 236, 240, 241.

¹²⁷⁰ Bambrough, *Reason*, 7, 6, 10.

¹²⁷¹ *Individuals*, 9, 10. Cf. White's distinction between "conceptual" and "ontological metaphysics", which he traces back to Kant's contrasting of genuine and false metaphysics. By ontological metaphysics White understands the metaphysics of transcendence, the conceptual investigates our most general concepts (*Method*, 200). Carr likewise defines metaphysics as the activity of categorial description, yet criticizes Strawson for neglecting the linguistic factor and for the unhistorical consideration of categories. He thinks that through the assumption of an original belonging-together of category and reality he can account for the historical-subjective factor and at the same time escape relativism; accordingly, there is not a reality in itself which must then be poured into our concepts, but the formation of these latter is identical with the formation of reality (*Metaphysics*, 2, 11, 154 f.). Hamlyn parallels Strawson's opposition of revisionary and descriptive metaphysics with the distinction between traditional metaphysics, which was based on the contrast of appearance and reality, and metaphysics in the sense of general statements about the world and man. He rightly notes that the term "revisionary metaphysics" was chosen or interpreted unhappily by Strawson because the metaphysicians concerned did not want to subject the world, but rather the views of other metaphysicians to a revision (*Metaphysics*, 6, 5).

to be mentioned to define metaphysics from the problem of knowledge, and specifically from the question of the conditions of its reliability.¹²⁷²

We said that the interpretation and use of the concept of metaphysics in the sign of epistemological considerations began anew already in the 19th century (i.e., without direct connection to Enlightenment precedents) when the significance of the formation of supra-empirical or "metaphysical" hypotheses for the development of science was highlighted against strictly inductivist positivism. A particularly modern-seeming form of this epistemologically inspired positive evaluation of metaphysics meets us in Whewell's polemic against Comte and Mill. Whewell takes the positivist opposition of positive science and metaphysics under fire; in doing so, however, he understands the sense of the latter no longer traditionally, like the positivists themselves, but expands it (by speaking e.g. of the "metaphysical principle of equable circular motions" etc.) such that his defense of metaphysics cannot simply be dismissed as a naive relapse into the doctrine of transcendence. In his eyes, in any case, the need of science for metaphysics is grounded in the finding that experience can prove necessary truths only with the help of supra-empirical ideas and that induction does not simply coincide with observation and with experience in general, but must contain generalizations and supra-empirical assumptions.¹²⁷³ It need not be explained here what modifications such thoughts underwent in the various directions of conventionalism, especially since its representatives, therein faithful to the positivist tradition, generally avoided designating the scientifically necessary conventions (hypotheses or laws) as "metaphysics".¹²⁷⁴ We are rather interested in the fact that the arguments which were advanced in recent decades against the strictly "anti-metaphysical" epistemology of logical positivism are in many ways reminiscent of the older critics of positivism; in both cases, incidentally, the positive use of the concept of metaphysics in the epistemological context is identical. Our contemporary advocates

¹²⁷² See e.g. Grice-Pears-Strawson, *Metaphysics*, esp. 12 f., 15 ff.; Hampshire, *Metaph. Systems*, esp. 28 ff., 33 f. Similarly Reininger, who defines metaphysics as science of the Absolute, but not of the Absolute of Being, but first of all also because "the ontological problem ultimately flows back into the question of the possibility of definitively final decisions", thus into the problem of knowledge. This metaphysics, which can just as well be called transcendental philosophy, is not a system, but method, and proceeds in stages in the consciousness of the unknowability of everything that transcends the context of experience (*Metaphysik*, II, 143 ff., 177 f.).

¹²⁷³ *Philosophy of the Inductive Sciences*, II, 320 ff.; *Philosophy of Discovery*, 238 ff.

¹²⁷⁴ Thus e.g. Poincaré (despite reservations against the feasibility of inductive procedure, see *Science*, 6) or Mach, who uses the concept of metaphysics in a thoroughly negative sense, see below 4a (cc). Also Duhem, for whom thought-economical viewpoints likewise determine theory formation, by no means identifies metaphysics and physical theory, but thinks metaphysics begins only when one devotes oneself to the futile effort of explaining experimental laws (*Théorie*, 6 ff.). An opponent of conventionalism and positivism like Meyerson, on the contrary, emphasizes the role of the "metaphysical" in scientific theories (see e.g. *Déduction*, § 196, cf. § 279).

of this use often explain that they came to the re-examination of the role of the "Metaphysical" in science as a result of the theoretical failure of logical positivism as well as the realization that the consistent application of its anti-metaphysical program would have had to make every scientific statement impossible.¹²⁷⁵ This new evaluation of the relationships between metaphysics and science differs, of course, from attempts to trace the worldview foundations of great modern scientific theories back to assumptions of traditional metaphysics.¹²⁷⁶ "Metaphysics" deals here with the nature of scientific concepts, with the (epistemo)logical status of laws, with the theoretical apparatus of science in general—in short, with everything in science that has supra-empirical character.¹²⁷⁷

Projected into the historical past, this conception of the Metaphysical can even create the impression that metaphysics arose in general as reflection on the scientific knowledge of the world.¹²⁷⁸ Buchdahl explains the necessity of metaphysical expansion of scientific theories by pointing out that the key concept by means of which such theories wanted to interpret the world as a whole was taken from a particular aspect of reality and would therefore have had to prove too narrow. Therefore, the interpretation of the world shifts to a metaphysical focus, which for its part requires elucidation by the "analogical grammar" of a certain empirical, logical, or theological concept. Depending on time and situation, the metaphysical focus can be chosen differently, so that alternative interpretations of identical material are possible, indeed inevitable, whose differences from one another spring from the respective "response," i.e., the basic attitude of the theoretician; in view of this, one cannot expect a gradual uncovering of the One truth, but one must reckon with a constant succession of "responses," i.e., of interpretations and theories.¹²⁷⁹ Similarly, Agassi opines that scientific theories can be interpreted from different metaphysical standpoints; the metaphysical framework of science determines the meaning of pure scientific theory, especially since individual metaphysical hypotheses in science can only be founded on comprehensive metaphysical concepts. Such concepts can admittedly usually not be verified experimentally, nevertheless the experimental verification of certain theories connected with a certain metaphysics can bring about the demise of the other metaphysics. From a metaphysics, a scientific theory can thus develop—metaphysics can, in other words, become scientific in the sense that it detaches itself from mere speculation and approaches the inductive procedure. Such a metaphysics is capable of making progress in its close connection

¹²⁷⁵ Wartofsky, *Metaphysics*, 124 ff., esp. 126 f.

¹²⁷⁶ Meant is Burt, *The Metaphysical Foundations*; see my remarks in: *Aufklärung*, 97, Note 226.

¹²⁷⁷ Buchdahl, *Science and Metaphysics*, 64.

¹²⁷⁸ Thus Buchdahl, *op. cit.*, 63, who however presupposes an already developed scientific knowledge. Bambrough attributes the inability of positivism to appreciate the contribution of traditional metaphysics to science to the confusion of linguistic form of expression and logical content or of external form and use of words (*Reason*, 134).

¹²⁷⁹ *Metaphysics*, 3 f., 9, 10.

with science and demanding the progress of science; in unscientific or uncritical cultures it therefore stagnates, in scientific ones it can have a progressive effect. In contrast to pseudo-scientific metaphysics, which anticipates or presupposes its own results, good metaphysics forms a research program and provides regulative ideas; then scientific theories and experiments, too, as historical examples show, have metaphysical reference and metaphysical relevance.¹²⁸⁰

In more radical formulations, it is stated by Wartofsky that the historical finding of the fruitfulness of metaphysical views for the development of the sciences should be translated at present into a conscious use of metaphysics as heuristic. Metaphysics is the most general method for the systematic establishment of alternative concepts and frames of thought, for it has to do with the original forms of understanding and explaining, it tells namely a story and dramatizes natural processes. These forms appear in metaphysics as reference, structure, and abstraction, which for their part represent the conditions of scientific theory formation; the suitability of metaphysics for formulating the conditions for the conceptual structuring and thus for the intelligibility of scientific models is perhaps even more important than its anticipatory function.¹²⁸¹ It would be wrong, however, to classify such praises of metaphysics as a call to abandon experience and empirical science. On the contrary, short-sighted positivist empiricism is declared war on because it shows itself incapable of grasping the whole of experience, whereby it quite rightly (indirectly) encourages unfounded metaphysical speculations to fill existing gaps in the worldview. That, at least, is what Feyerabend believes, who starts from the consideration that the direct connection assumed by empiricism between facts and theory cannot exist. For the establishment of the same, certain supra-empirical statements are indispensable, which give the theory a meaning and enable its interpretation; this interpretation contains metaphysical elements if one means by "metaphysical" "non-empirical".¹²⁸² In general, facts are only interpreted on the basis of certain theoretical assumptions—but also simply registered. A good empiricist, i.e., one who is constantly in search of new facts, must demand theoretical pluralism and thus the establishment of empirically unverifiable, or metaphysical theories. Quite independently of their verifiability, they are useful as alternative standpoints, for without reference to alternatives no criticism can be exercised; observation results or established theories can also be subjected to new testing in this way.¹²⁸³

In this context, mention must still be made briefly of less influential views in which the relationship of experience and metaphysics to one another is conceived rather in the manner of

¹²⁸⁰ *Science in Flux*, 210, 282, 288, 213, 208, 227, 225, 212, 208.

¹²⁸¹ *Metaphysics*, esp. 150 ff., 168.

¹²⁸² *Realism*, 42.

¹²⁸³ *How to be a good Empiricist*, 22, 25, 26, 34 f.

the old inductive metaphysics. The authors are namely not so much concerned with the anticipating establishment of metaphysics with heuristic value in more or less extensive independence from experience, but rather with the gradual elevation of experience into the Metaphysical or Supra-empirical through its (inevitable) theoretical processing. The metaphysical hypothesis or metatheory arises accordingly where a world-immanent region is transcended towards its horizon of totality, from which alone the constitution of this region and all others can be grounded; it is supposed to encompass all possible regional hypotheses in a conception of totality, i.e., presuppose the already existing theories about empirical states of affairs and integrate them; it thus deals not directly with objects, but with theoretical representations, on whose mode of knowledge and conditions of validity it reflects simultaneously.¹²⁸⁴ With regard to the totality of the individual sciences, whose interdependence cannot by itself bring about a unified "super-science," the task of metaphysics consists not in correcting or abolishing the results of scientific research, but in reflecting on them, in finding out their implications and inner relationships as well as in clarifying their foundations; the philosopher should, in other words, engage in general considerations on the method of science and on the legitimacy of its basic concepts, without entering into a substantive critique of its research results.¹²⁸⁵ Here, of course, it remains unclear what prerequisites the philosopher must fulfill, i.e., what scientific knowledge he must possess, in order to be able to master his metaphysical task understood in this way reasonably successfully. Sailing between the Scylla of amateurism and the Charybdis of scientific pedantry becomes increasingly difficult in view of the enormous accumulation of positive knowledge as well as the refinement of logical and mathematical methods.

Just as in the second half of the 19th century positivists and Neo-Kantians condemned the use of the concept of metaphysics in connection with the activity of the sciences, so too the neopositivists of the 20th century resisted it with all their might, for they knew that talk of metaphysics in this context was intended to symbolically express a questioning of their guiding ideas; in any case, the different linguistic usage in this point meant a serious difference of opinion regarding the possibility of empirical verification of what was regarded in each case as the fundamental principle. The fight against the introduction of the concept of metaphysics into scientific philosophy was opened by Schlick, who, tying in with older argumentations,¹²⁸⁶ replied to the demand for inductive metaphysics that induction in itself opens up no new area, i.e., can convey no general knowledge of a fundamentally different kind than that gained by the usual scientific procedure; "every inductive extension of knowledge remains necessarily within

¹²⁸⁴ Holz, *Was sind... metaph. Modelle*, 181, 174.

¹²⁸⁵ Harris, *Foundations*, 28 ff.

¹²⁸⁶ See above Note 186.

the sciences and never leads to a metaphysics".¹²⁸⁷ The envisioned ideal of a thorough scientification of philosophy makes talk of an inductive metaphysics appear empty. In the sense of this same ideal, Carnap did not want to allow philosophical areas that are to be worked on "with strict scientific concepts" to be designated as "metaphysics"; the name "basic science" (*Grundwissenschaft*) could be reserved for the first cognitions (from the perspective of logical-cognitive order).¹²⁸⁸ But even when the neopositivists had long been on the defensive and had had to loosen or drop many an original rigid principle, they did not cease to protest in the same spirit against the epistemological, ontological, and gnoseological use of the concept of metaphysics. Nagel opined that the designation of every comprehensive generalization as "metaphysical" or "ontological" violated the "ethics of words" and was completely unhistorical, depriving the concepts of any definite content.¹²⁸⁹ Frank for his part wanted to know nothing of a constructive role of metaphysics for the development of science. If one judges metaphysics on the basis of the experimental meaning criterion, there is no difference between it and science—metaphysics, however, actually lives from the endeavor to get rid of this meaning criterion; metaphysics with scientific pretension can therefore today be nothing other than the untimely translation of an advanced scientific language into that of an overcome phase of knowledge.¹²⁹⁰ In a rearguard action, Feigl finally repeated Schlick's objections against the project of an inductive metaphysics and varied Carnap's proposal for the introduction of the term "basic science" to the effect that as a "logical empiricist" and to the extent that one investigates fundamental concepts and methods, one should prefer terms like "logical analysis," "theory of knowledge," or "philosophy of science" to the concept of metaphysics.¹²⁹¹

The resistance of the neopositivists—or whatever they call themselves respectively—against the use of the concept of metaphysics outside the traditional context of transcendence metaphysics has been just as futile as that of their predecessors. Meanwhile, this loose linguistic usage has spread so widely, indeed become institutionalized, that one runs the risk of not being taken seriously philosophically if one does not want to admit that one represents a "metaphysics" anyway or that one's substantive views are grounded in a categorial framework.¹²⁹² The popularity that the concept of metaphysics enjoys recently represents in itself no sign of a revival of metaphysical thought in the traditional sense, but signals on the one hand the detachment from positivism, and on the other hand lies in the vagueness, thus arbitrary

¹²⁸⁷ *Aufsätze*, 11 f.

¹²⁸⁸ *Aufbau*, § 182 = p. 258. The intellectual situation at that time, in which a strong "metaphysical" reaction against scientific rationalism etc. announced itself, explains why Carnap wants metaphysics to be understood only in the context of "intuitive processes".

¹²⁸⁹ *Logic*, 101 f.

¹²⁹⁰ *Modern Science*, 286 ff.

¹²⁹¹ *Some Major Issues*, 22.

¹²⁹² See e.g. Körner, *Metaphysics*, esp. 149 ff.

usability of the mentioned concept. This latter makes it possible, indeed, that nowadays one no longer has the feeling of setting up a paradox when one commissions "metaphysics" with "critical" tasks that could be mastered by means of rationality structures lying beyond "pure facticity" and at the same time not merely instrumental.¹²⁹³ The observation of the current proliferation of the concept of metaphysics must not, however, necessarily be equated with a prediction of eternal prospering.

¹²⁹³ Geyer, *Metaphysik*, 18 f.

4. The Reformulation of the Basic Types of Metaphysics Criticism

a. Agnosticism, Anti-intellectualist Tendencies, Positivism

In the previous section we had to discuss individual anti-metaphysical positions of older and newer positivism without reconstructing positivist metaphysics criticism as a whole. This shall now be made up for, especially since positivism defined itself from the beginning as the anti-metaphysical movement *par excellence* and achieved a critique of metaphysics that intended to be independent and exhaustive. And yet, positivist metaphysics criticism is intertwined with partly quite heterogeneous motifs and tendencies and becomes fully understandable only in connection with these. If positivism and agnosticism go hand in hand initially, the agnostic aspect of positivism weakens over time, while its reliance on conventionalist views strengthens. On the other hand, in its struggle against metaphysical intellectualism, positivism makes common cause (unintentionally) with metaphysical, yet anti-intellectualist directions, whereby the old alliance of anti-metaphysical attitude and fideism is partly revived. For an adequate presentation of this complex of ideas, this section must be structured in the form of a triptych.

aa. The Dwindling Significance of Agnosticism

The evidence for the dropping of the fundamental distinction between thing-in-itself and appearance or Being and semblance—despite its temporary revival by Neo-Kantianism—has been piling up since the last third of the 19th century¹²⁹⁴ and testifies in itself to the dwindling significance of agnosticism for the polemic against metaphysics. While agnosticism found broad anti-metaphysical use in earlier times, including the Age of Enlightenment, because it enabled a combatting of traditional transcendence while simultaneously rejecting the suspicion of atheism or nihilism, thus offering an important tactical advantage against a powerful and vigilant church,¹²⁹⁵ the secular bourgeoisie, becoming increasingly stronger and more self-confident since the second half of the 19th century, could afford a much more open and direct confrontation with transcendence metaphysics and theology in general. Accordingly, agnosticism largely detaches itself from its old, albeit always ambiguous and unstable, alliance with fideism; fideism now turns against the secular-profane agnosticism of the utilitarian-minded bourgeoisie, and this agnosticism in turn tries to escape the suspicion of nihilism either by grounding metaphysics or religion on a practical-moral basis or by a purely immanent foundation of morality. In this respect, we are dealing here with the continuation and modification of Enlightenment or even earlier tendencies and positions, which now as then reach different degrees of radicality depending on the concrete situation and concrete carrier. With regard to the degree of anti-metaphysical radicality, Scheler distinguished between the

¹²⁹⁴ See above note 17 ff.

¹²⁹⁵ See above I 3, II 2, III 4a.

"positivist-sensualist variant" of agnosticism, which deletes not only the answers to metaphysical questions but the questions themselves, and the Kantian one, which poses these questions but seeks to answer them only on the practical-moral level.¹²⁹⁶ Windelband said roughly the same when he contrasted critical-agnostic doctrines with positivist ones and accused the latter of considering the thing-in-itself not only unknowable but downright an illusion; he agreed, however, with the positivist finding that the motives driving thought beyond the given were not of a theoretical character.¹²⁹⁷

A brief reminder of some high points of the English agnosticism debate will clarify the authoritative figures of thought and at the same time the course of radicalization in the last decades of the 19th century, so that a detailed entry into the extensive, but generally by no means brilliant literature of that time becomes unnecessary. The less radical agnostic position is represented here by Hamilton, who places fideistic motifs alongside his view of the limits of human knowledge. The conviction of the unknowability of the Absolute does not mean for him that the Absolute cannot and should not be believed in; the lack of knowledge is anything but a lack of faith, as indeed theology and the church themselves have demonstrated and preached through their doctrine of the unfathomability of the divine essence.¹²⁹⁸ This fideism, which is admittedly weakened in its practical consequences or secularized in a bourgeois sense by the opening to the sciences as well as to the practical-this-worldly attitude in general, rests on an epistemology that starts from the following principle: "to think is to condition; and conditional limitation is the fundamental law of the possibility of thought". For thinking can only take place within consciousness, and consciousness in turn is only possible on the basis of the opposition of subject and object, which mutually limit, i.e., finitize each other.¹²⁹⁹ Since we can only know according to the constitution and possibilities of our faculty of knowledge, we are unable to know qualities that behave asymmetrically to our faculty of knowledge; on the knowable qualities, in turn, something is modified or added to them corresponding to the nature of our faculty of knowledge.¹³⁰⁰ From this it becomes clear why the Absolute or Infinite cannot become the object of human thought. Its complete knowledge is out of the question because our finite horizon of knowledge cannot grasp it, and a partial knowledge of it cannot be attained because it has no parts and cannot be divided. What can only be known in relation to others is necessarily known as finite—even our talk of God always concerns only a property of the divine essence, such as the Creator or the Judge.¹³⁰¹ If we finally, in order to avoid a finitization of the

¹²⁹⁶ *Vom Ewigen im Menschen*, GW, V, 139.

¹²⁹⁷ *Einleitung*, 31, § 3.

¹²⁹⁸ *Lectures*, I, App. III, 530 f.; cf. 374 f.

¹²⁹⁹ *Discussions*, 14.

¹³⁰⁰ *Lectures*, I, 140, 141.

¹³⁰¹ *Loc. cit.*, II, 531 ff. (Letter to Calderwood of 26. 9. 1854).

Absolute, identify it neither with the subject nor with the object, but with the indifference point of both, as Schelling does, then in reality only Nothingness remains, which is admittedly hypostasized, called Absolute, and regarded as absolute existence, although it actually represents absolute privation.¹³⁰² Knowledge in the absolute sense, i.e., knowledge of things in themselves or of substance, is thus out of the question for us; we recognize exclusively appearances, and the existence of things in themselves appears in our horizon of knowledge only mediately, i.e., through certain qualities that are accessible to our cognitive faculties. Under these circumstances, the highest wisdom consists in the consciousness of our ignorance and our limits.¹³⁰³ Against the background of these convictions, Hamilton's philosophy takes shape as a theory about the forms of the human faculty of knowledge and knowledge, i.e., as Philosophy of Mind or Psychology; the name "metaphysics," however, is not only reserved for epistemology in its entirety but is simultaneously intended to designate in particular its third part, which is also called Ontology or Inferential Psychology and investigates things like God or immortality, which are indeed not given as appearances, but whose existence can be inferred inductively from appearances.¹³⁰⁴

Mill now characteristically calls into question not Hamilton's epistemological premises as such, but the religious-theological conclusions Hamilton wants to derive from them. As a continuator of the long tradition of modern secular agnosticism, which wanted to practically eliminate the transcendent by insisting on its unknowability and direct all cognitive effort to the this-worldly, Mill objects to Hamilton that whoever asserts the limitedness and relationality of our knowledge does so with the intention of making clear to us the fruitlessness of occupying ourselves with the Unknowable as well as the necessity of directing our theoretical attention to other things. Hamilton, however, attempts to achieve the opposite, namely to convince us that there can be well-founded certainty about the things declared unknowable; concepts like the Infinite and the Absolute are, however, not merely intellectually ungraspable, but also contradictory in themselves and can therefore be neither known nor believed.¹³⁰⁵ Mill combats in general Hamilton's view of the immediately given certainties of consciousness and wants to prove that these certainties can be traced back to empirical judgments. By pointing out the ambiguity of Hamilton's linguistic usage, he disputes moreover the equation of epistemologically and moral-philosophically understood certainty and does not allow the derivation of metaphysical truths from the needs or certainties of moral consciousness to pass. In the same sense as cognitive certainties go back to empirical judgments, morality too can be founded on experience or on (refined) utilitarian considerations; metaphysical convictions are

¹³⁰² *Discussions*, 33, 21.

¹³⁰³ *Loc. cit.*, 643 f., 634 f.

¹³⁰⁴ *Lectures*, I, 121, 125.

¹³⁰⁵ *An Examination of Hamilton's Philosophy*, V = CW, IX, 62, 64.

unfruitful, if not harmful, in a moral respect and can be replaced in their previous function by others.¹³⁰⁶

These are fairly unambiguous statements that testify that Mill's agnosticism did not amount to theoretical or practical indecision. Spencer shows himself more reserved or ambivalent, in both respects. On the practical level, he cannot quite believe that traditional religion can be effectively exchanged for a secular doctrine, yet on the other hand, in view of historical experiences, he does not rate the previous moral achievements of religion very highly; finally, he grants the agnostic a certain precedence by conceding him the right to prove how absurd the fear of future punishment of small sinners by an omnipotent being actually is—at the same time, however, the agnostic should not shake the conviction of those who expect eternal bliss as a reward for their good works.¹³⁰⁷ On the theoretical level, Spencer distances himself from Hamilton, but in such a way that no attack against transcendence must follow from it. Agnosticism in Hamilton's version, implies Spencer, separates the sphere of the Knowable from that of the Unknowable; to be able to draw such a dividing line at all, however, one must know where the limit of the Absolute runs, one must therefore be able to define or know the Absolute; the only consistent agnosticism is therefore that which simply asserts we could not even know whether the Absolute is knowable or not.¹³⁰⁸ Spencer accepts by and large Hamilton's justification of the metaphysical impotence of reason, namely the relational character of human thought,¹³⁰⁹ but on the other hand he rejects the assumption of faith in the sense of an evidence of moral consciousness just as Mill does. Hamilton, he writes, confuses two different kinds of belief with one another, i.e., the belief that I have immediately when I see light, for instance, and which requires no proof, indeed underlies every proof, with religious belief, which is not immediately given but mediated by moral consciousness. The former is common to all humans due to its immediacy, the latter assumes several forms due to its mediated character, from the views of cannibals to Christian dogma.¹³¹⁰

Huxley's radical agnosticism, which could earn even from such a strict ideological judge as Lenin the praise that it served merely as a fig leaf for materialism,¹³¹¹ reveals beyond any doubt that the anti-metaphysical struggle in its anti-religious implications no longer needed alibis and

¹³⁰⁶ *Utilitarianism*, CW, X, 229 f.

¹³⁰⁷ "What should the sceptic say to believers?", *Facts and Comments*, 205 ff.

¹³⁰⁸ *Essays*, II, 220. The same argument was used by Lotze against the Kantian view on the limits of knowledge, within which (good) metaphysics should move: these limits are not known in advance; to know them, we would first have to know about things themselves, their connection with one another and their relation to us (*Grundzüge*, §§ 3–4). Wittgenstein took up the argument again in the preface to his *Tractatus*.

¹³⁰⁹ *Essays*, II, 220 f.; cf. *First Principles*, § 24 = pp. 57 ff.

¹³¹⁰ *Essays*, II, 222 ff.

¹³¹¹ *Materialismus und Empiriekritizismus*, Chap. IV, § 2 = *Werke*, XIV, 206.

that precisely for this reason the significance of agnosticism was increasingly dwindling; not for the first time in intellectual history was a concept coined¹³¹² precisely at the moment when the matter itself was dying. Huxley's agnosticism constitutes a further development of the Enlightenment approach of removing everything from religion that could be described as metaphysical nonsense and reinterpreting and repurposing the rest according to the ideas and commandments of Enlightenment rationalism;¹³¹³ religion is for our agnostic simply respect and love for the ethical ideal as well as the wish to realize this ideal in this life.¹³¹⁴ The substantive definition of agnosticism by Huxley is, on the other hand, not particularly original or productive. He communicates without further philosophical differentiations that he had felt increasingly attracted to Hume and Kant; accordingly, he believes that an answering of the most serious and important questions, in which people tend to confuse clever phrases with real answers, is factually unattainable not only because of the limits of our faculty of knowledge, but also theoretically unthinkable.¹³¹⁵ More interesting than these declarations of principle are the specifications by means of which Huxley reveals what special concerns support his agnosticism. Here the attempt becomes clear to build a firm bridge to scientific or rationalistic optimism. For Huxley, agnosticism is not a creed but rather a "method," whose basic principle in its positive formulation states: in questions of the intellect, follow your reason without other regard to the point where it can lead you. Negatively formulated, this means: in questions of the intellect, nothing is certain if it is not proven or provable; what is unproven today can be proven tomorrow by new discoveries, with the exception of that which, on the basis of demonstrated limitedness of our faculty of knowledge, must be regarded as unprovable.¹³¹⁶ The center of gravity of interest thus lies not in the simply unprovable, but in the not-yet-proven, which stimulates and drives forward the activity of the researcher. Huxley says explicitly that he cares little about the "Unknowable" as such and he even regrets having used and capitalized this word. He notes with fair indifference that many things lie outside the range of his cognitive ability, and happily moves on to the agenda of science.¹³¹⁷

With Huxley, agnosticism has not only completely detached itself from the old ambiguous alliance with fideism but has additionally received an undisguised anti-religious tip; eloquently, the Englishman's treatises on agnosticism are largely devoted to Gospel criticism. This form and use of agnosticism led towards the end of the 19th century to the question of agnosticism being discussed primarily in connection with the religious question and to agnosticism being able to

¹³¹² Incidentally by Huxley himself, and indeed as a counter-concept to early Christian "Gnosticism", see *Agnosticism*, 239.

¹³¹³ See Kondylis, *Aufklärung*, 361 ff.

¹³¹⁴ *Agnosticism*, 249.

¹³¹⁵ *Loc. cit.*, 237, 236.

¹³¹⁶ *Loc. cit.*, 245 f.

¹³¹⁷ *Agnosticism and Christianity*, 311 f.

be designated as the "religious specialty of skepticism".¹³¹⁸ This was obvious in view of the now striking convergence of agnosticism and scientific progress optimism as well as due to the fact that in the same period the struggle between metaphysics and anti-metaphysics, for understandable social reasons, often appeared under the special aspect of the conflict between religion and science. In the eyes of its most radical, specifically materialistically minded advocates, science appeared as the power that would complete the work of the Enlightenment and overthrow all myths of religion, from the doctrine of creation and anthropocentrism to the belief in immortality, once and for all.¹³¹⁹ Precisely the danger of a one-sided identification of the sciences with the by no means agnostic materialism (see below) prompted many an agnostic to submit concepts for the reconciliation of science and religion. In a reconciliation attempt that was much noted and discussed at the time, Spencer started from the consideration that the dispute between religion and science could be settled if one realized that each of them contained a truth independent of the truth of the other, and that the two truths could be brought into harmony within the framework of a superordinate view. This view states that the force in which the universe manifests itself is unfathomable, since neither religion can lift the last riddles, as the logical dead ends of the doctrine of creation testify, nor can science achieve complete clarity about its own fundamental concepts (space, time, matter, consciousness, etc.). Religious and scientific ideas thus form equally symbols of the Real, not explanations of the same; the double finding that behind the appearances a reality must be assumed and that thought nevertheless cannot penetrate into this reality necessarily assumed by itself, provides the common denominator of religion and science. For the reduction of the two to this denominator, however, science must give up every metaphysical claim to final knowledge, while religion for its part is to be freed from dogmatic ballast.¹³²⁰ It is obvious that the separation of religion from dogma caused much greater difficulties than the painless renunciation by science of knowledge of a metaphysical character. For even the assumption of a thing-in-itself does not *eo ipso* mean the assumption of a transcendence, and even the assumption of a transcendence does not automatically mean that the transcendence is constituted as, for example, Christianity wants it. With its dogmatic aspects, religion must simultaneously lose its specific features, which are intended to underpin its claim to establish socially binding norms of concrete content.¹³²¹

Not only Christians showed themselves unwilling to enter into such compromises. Even a positivist like Littré opined that the assumption of the Unfathomable or Unknowable could hardly serve as a basis for reconciliation. For to science, the Unknowable constitutes the limit of

¹³¹⁸ Thus Cohen, *Religion der Vernunft*, 70.

¹³¹⁹ See characteristically Büchner, *Weltanschauung*, esp. 46 ff.

¹³²⁰ *Principles*, §§ 6, 14 ff., 22, 27 ff. = pp. 15 f., 32 ff., 50, 73 ff.

¹³²¹ Already Pascal committed the logical error of wanting to save Christian transcendence by pointing to the limits of human cognitive faculty, see Kondylis, *Aufklärung*, 145.

knowledge, but to religion the object of faith. The uses of these two meanings of the Unknowable also differ fundamentally: with the help of the assumption of the Unknowable, religion wants to organize this world or society in a certain way, whereas the scientifically Unknowable exerts no practical influence. And finally, science regards the Unknowable also as the Indeterminable, which religion cannot accept without dissolving into science.¹³²² The strength of these arguments—as well as conversely the weakness of reconciliation attempts in the manner of Spencer—makes understandable why the wish of broad sections of the laistic bourgeoisie or of anti-metaphysically and at the same time anti-materialistically minded philosophers to nevertheless enable a coexistence of religion and science was usually met not by the demonstration of a substantive compatibility, however fashioned, but on the contrary by the clean demarcation of their areas of competence. This demarcation is found, for example, already among the pragmatists, who distinguish between the practically directed and useful religion as a matter of the heart and the anti-scientific religion of dogma and the understanding; a religion that is not dependent on a rational metaphysics but concerns itself with ethical questions and the moral improvement of people can stand unproblematically by the side of science.¹³²³ But even philosophers who treat religion much more sympathetically without wanting to write off science on that account, submit similar demarcation proposals and assign to religion, whatever they understand by it, the realm of the human person or that of moral and aesthetic values.¹³²⁴ The problem of the relationships between religion and science lost its sharpness gradually in the course of the 20th century, however—not least due to the increasing dogmatic amorphousness and colorlessness of religion—and is thus also no longer interesting for our line of inquiry.

The polemic against materialism entailed that agnosticism in the 19th century often had to be deployed as a weapon on this front, whereby *mutatis mutandis* the basic constellation of the 18th century repeated itself, when the main current of the Enlightenment fought against traditional theology and simultaneously against the materialist false brother. Du Bois-Reymond's famous "Ignorabimus!" contained a clear anti-materialist point, as it referred to our insurmountable inability to comprehend, on the one hand, the essence of matter and force, and on the other, "mental processes from material conditions".¹³²⁵ Just a few years earlier, Lange had set himself the same double task, i.e., to settle traditional metaphysics and materialism at once with agnostic means. There is no hope, he wrote, of ever solving the problem of matter and its forces; the obstacle here is a transcendent one, for we can imagine nothing without any sense qualities, while at the same time we strive to reduce these qualities to mathematical relations. The barriers

¹³²² *Préface*, 64 f.

¹³²³ See e.g. Peirce, 6. 438–443, cf. 8.8; James, *Varieties*, 433 ff.

¹³²⁴ See e.g. Boutroux, *Science et Religion*, 358 f. (cf. the polemic against Spencer, 108 ff.); Whitehead, *Science*, esp. 185, 190.

¹³²⁵ *Über die Grenzen*, 73.

of natural knowledge cannot be broken through, for they are not a power opposing us, but lie in our own nature. Therefore, materialism can be nothing more than a "maxim of natural research." On the other hand, the inability of materialism to recognize the Ultimate must not be interpreted as a license for theology and theological metaphysics, which want to capitalize on the failure of materialism. Against them, Lange defends the possibility of satisfactory positive knowledge and does not want agnosticism to be understood as a questioning of science in general.¹³²⁶ To justify this, he must of course resort to a fictionalist as-if consideration: even if a theory is not true in the dogmatic sense, it can still serve knowledge if it serves the arrangement and comprehension of phenomena in connection with the constitution of our faculty of knowledge.¹³²⁷ Even at the beginning of the 20th century, Neo-Kantians felt they were waging a war on two fronts simultaneously.¹³²⁸

It is not difficult to guess the answer of the materialists to agnostic attacks. They argued that this allegedly unknowable thing-in-itself was the safe refuge of theologians and mystics and that its mere assumption degraded the dignity of science, whose purpose consists in knowledge and not in the admission of ignorance; moreover, even a thing-in-itself actually existing somewhere would in no way come into consideration for our thought and being.¹³²⁹ It is noteworthy, however, that many a materialist who advanced such arguments against agnosticism shifted the focus of his argumentation considerably as soon as it concerned the other enemy, namely metaphysics with its definitions of the Absolute or religion with its belief in revelation; then one preferred to emphasize that all our knowledge and imagining is relative and we possess no absolute ideas.¹³³⁰ Materialists who argued on two tracks must be credited, however, with the fact that not only with them did polemical consistency often outstrip the logical one.

¹³²⁶ As in the 17th or 18th, so too in the 19th century voices were raised accusing agnosticism of abolishing the possibility of *any* knowledge and not just metaphysical knowledge, see e.g. Hartmann, *Geschichte*, II, 498.

¹³²⁷ *Geschichte des Materialismus*, II, 197, 217, 201, 207, 225 f.

¹³²⁸ Thus Adickes as a declared "agnostic" wants to oppose both the "nihilists" (i.e., materialists and skeptics) and the "dogmatists" (i.e., the metaphysicians, including the adherents of a "scientific metaphysics"), see *Zukunft*, 222.

¹³²⁹ Büchner, *Weltanschauung*, 65. In two articles written in 1877 against the nascent Neo-Kantianism, Dietzgen even demanded of Social Democracy "to advocate for the radical unlimitness of human intelligence against the incorrigible mystics" ("Das Unbegreifliche" and "Die Grenzen der Erkenntnis", *GS*, I, 199–204, 204–213, the quote is on p. 199). In a similar sense Lenin, who quotes Dietzgen extensively alongside Engels and Feuerbach, deals with the question of the thing-in-itself, see *Materialismus und Empirio-kritizismus*, Chap. II, esp. § 3 = *Werke*, XIV, 111 ff.

¹³³⁰ So e.g. Büchner, *Kraft*, 175. Cf. Bakunin's advocacy for scientifically grounded agnosticism against the omniscience claim of theology and metaphysics, *Phil. Betrachtungen über das Gottesphantom*, *GW*, I, 267.

bb. The Struggle Against Metaphysical Intellectualism in Fideistic and Profane Perspective

We know that corresponding to the double meaning of "metaphysics" as assumption of a transcendence and/or as claim to rational knowledge of Being, two things could be advanced against it: that there is either no transcendence or that reason cannot take possession of the essence of things. If one wanted to hold on to the assumption of transcendence despite rejection of the cognitive claims of reason, one could take the path of fideism. This was the stereotypical constellation since the 14th century, and it could hold as long as the traditional assumption of a transcendence was largely unchallenged. After its collapse, the rejection of the omniscience claims of the intellect was directed not (only) against the old metaphysics, but (also or primarily) against science; and since religiously understood transcendence was now practically dead for profane metaphysicians as well, one opposed scientific thought not with fideism and faith, but with likewise secularized forms of non-rational thought such as intuition, vision, "higher thought," etc. In the double demarcation against the rationalism of the old metaphysics and the rationalism of science, the optical illusion arose that old metaphysics and modern science belong together by nature, although one would have to oppose them from a fideistic perspective with something different than from the perspective of secularized, specifically monistically oriented metaphysics.

Thus the development from Kierkegaard via Bergson to Heidegger can be summarized in its broad intellectual-historical lines. With Kierkegaard, the conventional constellation repeats itself fundamentally once more, i.e., metaphysics is rejected not as assumption of a transcendence, but as rational claim to omniscience on a fideistic basis. However, this repetition takes place in the concrete intellectual-historical situation of the middle of the 19th century and certain consequences for its character result from this. First, metaphysical abstraction is opposed here not by faith in general, i.e., as a merely theological magnitude without regard to the respective concrete carrier, but by believing existence in all its inner dynamism; obviously, such a conception of existence could only thrive on the soil of bourgeois-romantic individualism, despite all reversal of signs. Second, already in Kierkegaard, who like the other sons of his time lets himself be (negatively) impressed by the stormy rise of the sciences, that equation of metaphysical and scientific abstraction or mode of thought emerges, which will be practiced much more emphatically and fundamentally later. It is characteristic in this respect how Kierkegaard parallels the displacement of theology by metaphysics with the displacement of the moral in its existential concreteness by the physical-scientific mode of observation.¹³³¹ Science and metaphysics thus equally suppress the living and concrete through their abstractions; Kierkegaard's metaphysics criticism stands in any case particularly clearly under the sign of this figure of thought. The "abstract," which is not infrequently used synonymously with the

¹³³¹ *Tagebücher*, II, 30.

"metaphysical",¹³³² must in its rigidity remain eternally with itself, it cannot namely go beyond itself and arrive at the concrete; for "as soon as the being of truth becomes empirically concrete, the truth itself is in becoming" and the correspondence of thought and Being, which is present in God, eludes the possibilities of a concretely existing mind, thus one situated in becoming¹³³³. The understanding, the carrier of the abstract, would have to negate itself in order to be able to think the absolute difference as it incessantly occurs in becoming.¹³³⁴ Therefore, metaphysical thought also entangles itself in insurmountable contradictions as soon as it sets out to master historically reality, which it nevertheless poses to itself categorically-systematically as a problem, theoretically.¹³³⁵ The historically existing human being exists in the three fundamental spheres of existence, i.e., the aesthetic, the ethical, and the religious. Metaphysically, however, no human being can exist, for the metaphysical is the abstraction, it *is* indeed *in the sense of ontology*, but it is not there, and to the extent that it is there, it is in the aesthetic, in the ethical, or in the religious.¹³³⁶

The gap between metaphysics and existence interests Kierkegaard, as is known, as the gap between metaphysics and believing existence, thus between metaphysics and religion or (true) theology. The opposition sharpens now, i.e., it exists not only between abstract and concrete, but simultaneously also between rational claim to knowledge and faith. In view of the sharpness of this double opposition, Kierkegaard opines that only sophists would want to place the metaphysical in an immediate relationship to the religious.¹³³⁷ A metaphysical treatment of theological dogmatics or a dogmatic treatment of metaphysics falsifies metaphysics and dogmatics alike; moreover, this inadmissible mixing is not even Christian, but has its origin in the pagan "lack of infinite reflectedness," which conditioned Aristotle's decision to include in metaphysics a part of that "which according to our concepts belongs in theology".¹³³⁸ Thus it came about that one wanted to treat the propositions of theology in the same way as the propositions of metaphysics, i.e., demonstrate them rationally. Even the first and decisive principle of theological thought, namely that there is a God, cannot be proven rationally-metaphysically. Kierkegaard's central juxtaposition of abstract or metaphysical and concrete or existing takes on the form of the contrasting of conceptual determination and

¹³³² See e.g. *loc. cit.*, I, 228: "the abstract, the metaphysical..."

¹³³³ *Abschließende unwissensch. Nachschrift*, I, 181.

¹³³⁴ *Brocken*, 42.

¹³³⁵ *Tagebücher*, I, 228. At this time (4. 7. 1840) Kierkegaard still seems to believe in the possibility of a reconciliation of the metaphysical and the accidental within the historical, although he already accuses the Hegelians of seeing "the phenomenon from the bird's eye view of the metaphysical and not also the metaphysical from experience in the phenomenon".

¹³³⁶ *Stadien*, 507.

¹³³⁷ *Loc. cit.*, 517.

¹³³⁸ *Der Begriff Angst*, 59, 18.

existence in the discussion of the question of the ontological proof of God. From the former, one can derive the latter only if one has already assumed that it is there, and "so I conclude consistently not *to* existence, but I conclude *from* existence." Only the failure to distinguish between factual and ideal Being allows the impression to arise that existence can be concluded from the concept. In the language of traditional ontology, this means that talk of ideal Being refers not actually to Being, but to Essence. The ontological proof of God, in which precisely Essence and Being or ideal and factual Being are confused with one another, rests otherwise on a tautology: the concepts Being and Perfection are held to be identical and then the one is deduced from the other.¹³³⁹

As noted, after the collapse of the traditional transcendence and two-worlds doctrine, it became increasingly difficult to appear against metaphysical intellectualism under the banner of fideism. Intellectualism or "rationalism" was now represented more by triumphant science and self-confident scientism than by metaphysics, and the struggle against it was led in turn by philosophers who had themselves lost faith in the old transcendence and distanced themselves from the dualism of traditional metaphysics together with the associated separations (thing-in-itself and appearance or Being and semblance) in their own respective ways.¹³⁴⁰ Under these circumstances, scientific "rationalism" could only be opposed by a—*sit venia verbo*—secular fideism, which appeared in the colorful guise of innumerable variations of intuitionism especially since the turn of the century. While in the 17th century the new metaphysics, which arose under the impression of the still young modern natural science, liked to compete with it in rationality, metaphysics in the 19th and 20th centuries is usually built on the conviction that a knowledge beyond the scientific-rational is legitimate and even superior. This anti-rationalist (more precisely: anti-intellectualist) tip had to turn against traditional metaphysics insofar as modern metaphysics, due to its detachment from the doctrine of transcendence, could hardly feel solidarity with the traditional one and moreover had every reason to demonstrate its own modernity in the explicit or even ostentatious distancing from this latter and thus to disarm its enemies from the field of science etc. argumentatively. Modern metaphysics therefore cannot help but appear as metaphysics criticism, i.e., as critique of traditional metaphysics. For it has abandoned not only transcendence and the two-worlds

¹³³⁹ Brocken, 37 f., 39, note.

¹³⁴⁰ Here we must disregard the development in the field of theology, which however followed the general trend in the 20th century, especially in its Protestant variant. Although the theological reaction against "rationalism" had to exhibit fideistic features by definition (even demythologization efforts were intended to serve the autonomization of faith by detaching it from historical accidents), these mixed with existentialist motifs, and thus partly secularized themselves, while simultaneously the monistic orientation of modern metaphysics was reflected in the diligent elaboration of Christologies or "theoanthropologies", which were intended to reduce the gap between God and man or the Beyond and the Here.

doctrine but also the classical claim to grasp Being as a rational whole with rational means—thus scientifically in the ancient sense. Attempts or wishes to build metaphysics as final knowledge of Being on a logical basis or to think metaphysics and logic together appeared ever more rarely (McTaggart) and came from ever more obscure and unproductive corners.¹³⁴¹ The opposite tendency prevailed relatively easily and retained the upper hand even after the Second World War.¹³⁴²

In another context we explained how Bergson adopted the derogatory equation of scientific and metaphysical rationalism (read: intellectualism), which had already become common around 1900.¹³⁴³ Traditional metaphysics and modern science, he opined, both start from the idea of a reality given once and for all, so that a metaphysics reformed from the ground up, oriented towards becoming and duration, would have to turn against both simultaneously.¹³⁴⁴ Now Bergson takes a step further and says that the static conception of traditional metaphysics and science about Being, based on rigid separations and mechanical classifications, corresponds thoroughly to the essential features of the metaphysical and scientific intellect or of the intellect in general, whose creature it is. The intellect, in other words, can only grasp the discontinuous and the immobile, it thinks mechanically, i.e., according to analytical and synthetic rules, it is directed towards the inorganic, and its task consists in treating the inorganic instrumentally and utilizing it.¹³⁴⁵ The confusions and contradictions found in traditional metaphysics necessarily spring from the use of the static and isolated or mechanically connected concepts of the intellect, which for their part arose from practical-instrumental needs.¹³⁴⁶ The conclusion reads: the intellect is essentially instrumental, and the intellectualist-instrumental mode of thought conditions equally the intellectual achievements of traditional metaphysics and modern science.

In this intellectual-historical perspective, Heidegger's metaphysics criticism appears not only substantively questionable but also much more banal than a reader can realize who is not

¹³⁴¹ See e.g. Tchitchérine, *La Métaphysique etc.*, who asserts against positivism and empiricism the unity of the laws of logic with the laws of nature and derives the scientificity of metaphysics from the scientificity of logic.

¹³⁴² Even Thomists now felt obliged to emphasize the intuitive in order to make clear the distance of metaphysics from science, see Gilson, *Remarques*, 7: "En tant que science la métaphysique repose sur l'intuition intellectuelle des principes et la vue directe de leur vérité". Otherwise it is customary to emphasize that in metaphysical experience "the matter itself becomes immediately present" (thus Weischedel, *Wesen und Aufgabe*, 125). When it is added to this that all experience possesses equal evidence, this is intended to distract from the possibility that metaphysics might perhaps bear a greater burden of proof.

¹³⁴³ See e.g. Benrubi, *Leben und Metaphysik*.

¹³⁴⁴ See above note 26.

¹³⁴⁵ *Evolution*, Chap. II, *passim*.

¹³⁴⁶ *Introduction à la métaphysique* = *La Pensée*, 240.

familiar with the contexts (from the indicated ones to the details of right-radical culture and capitalism critique since the turn of the century) and who, moreover, in the midst of philosophical intoxication is willing to confuse grand and linguistically complicated sayings with spiritual revelations. First, Heidegger turns against the identification of the spirit with calculating-observing intelligence or against the "reinterpretation of the spirit as intelligence as mere cleverness" in the instrumental sense.¹³⁴⁷ He warns against the "danger of falling back into intellectualism" and demands the elimination of the "abuse of misinterpreted thinking" by a genuine and original thinking",¹³⁴⁸ which he calls "essential thinking".¹³⁴⁹ While this higher thinking "belongs to Being and listens to Being",¹³⁵⁰ the thinking of traditional metaphysics remains "representational," to it truth is merely "truth of knowledge and the statement of this".¹³⁵¹ Metaphysics can therefore only think according to the mechanisms that determine the process of representation, by distinguishing between subject and object: its thinking is thus objective (*gegenständlich*), it can grasp something only to the extent that it transforms it into an object among others. It sees only beings, not Being, in which such separations do not take place, and it sees beings without knowing that beings appear in the light of Being and can be seen at all only thanks to this light.¹³⁵² Likewise, logic is incapable of observing Being in its unconcealment; its beginnings go back to the moment when the being appeared as Idea and became the object (*Gegen-stand*) of science.¹³⁵³ This inner togetherness of metaphysical and logical thought explains why metaphysics must raise the claim to rational-intellectually acquired universal knowledge, and at the same time why it may not do so. For this thinking and this knowledge cannot grasp Being—the anti-intellectualist Heidegger even uses (which is intellectual-historically quite understandable) casually the old fideistic argument and reminds of the Apostle's warnings against attempts to want to comprehend God through the intellect or to mix theology and metaphysics with one another.¹³⁵⁴

These structural features of metaphysics have transferred to the whole of philosophy and the philosophical tradition. Regardless of whether it concerns the older ontology or the newer epistemology: they are grounded equally in the same separations and one-sided fixations—and primarily in the opposition between objectivity (*Gegenständlichkeit*), to which beings are reduced because of the forgetfulness of Being, and subjectivity, which for its part can take the two basic

¹³⁴⁷ *Einführung*, 35 f.

¹³⁴⁸ *Loc. cit.*, 93.

¹³⁴⁹ *Was ist Metaphysik?*, 49.

¹³⁵⁰ *Platons Lehre*, 57.

¹³⁵¹ *Was ist Metaphysik?*, 11.

¹³⁵² *Loc. cit.*, 7 f.

¹³⁵³ *Einführung*, 92.

¹³⁵⁴ *Was ist Metaphysik?*, 20.

forms of rational thought or naked will.¹³⁵⁵ Thus the "human insurrection into subjectivity" turns beings into mere objects—and objective is precisely "that which is brought to a stand by representing";¹³⁵⁶ between the merely representing character of thought and the objectification of beings there is thus an inner connection, and the relationship between thinking and beings can under these circumstances only be an instrumental one. This figure of thought appears, however, not only in the narrower field of philosophy, and it has not only philosophical but downright world-historical relevance, although the world-historical (as history of Being) receives a privileged expression in philosophy and through philosophy. The figure of thought prevailing in metaphysics or philosophy determines, in other words, the historical activity of man, his relationship to the world in which he must live with others. For metaphysics thinks similarly to science, but from science arises modern technology, in which the instrumental character of thought and the mere objective character of beings reach their climax. The rational subject thus becomes the carrier of the will to power and the being killed by its detachment from Being becomes the mere object of ruthless domination. Metaphysics seems to be overcome by technology, but in reality technology forms only a transformation and a continuation of metaphysics and its mode of thought. The laboring animal of technology emerges from the definition of man as *animal rationale* by traditional metaphysics; the "technical interpretation of thought" began indeed already with Plato and the Sophists, and even modern humanism makes itself the ally of metaphysics and of the "inhumane in the modern" to the extent that it professes the definition of man as *animal rationale*.¹³⁵⁷ In this world- and being-historical perspective, metaphysics must be designated as "nihilism".¹³⁵⁸

In this overall concept, as said, neither the equation of metaphysical and scientific mode of thought or the phenomenology of instrumental thought, nor the cultural criticism attached to it ("flight of the gods, destruction of the earth, massification of man, precedence of the mediocre")¹³⁵⁹ are original, specifically in such a way that the prophetic gesture could be justified. Hölderlin had already in 1795-1797 built his unification philosophy on a very similar figure of thought: thought detached from Being affects on the one hand as subjectivism and abstraction in philosophical theory and on the other hand as blind lust for domination of the subject over the object in historical practice—these are the two inseparable aspects of human hubris.¹³⁶⁰ Apart from the question of originality, however, two questions arise here concerning the logical and historical soundness of the overall concept. With regard to the first, it may

¹³⁵⁵ *Überwindung*, 74 ff.

¹³⁵⁶ *Holzwege*, 242.

¹³⁵⁷ *Überwindung*, 72; *Platons Lehre*, 54 f., 90, 64, 94.

¹³⁵⁸ *Holzwege*, 245.

¹³⁵⁹ *Einführung*, 34.

¹³⁶⁰ See Kondylis, *Entstehung*, Chap. II, Sect. 3.

remain open here whether the assumption of the existence (possibility) of a higher, non-instrumental and non-rational-intellectualistic form of thought can be justified at all. The equation of metaphysical and scientific thought form, specifically with the claim to make world-historical processes understandable thereby, encounters in any case an insurmountable difficulty; namely, it cannot be explained why technology could prevail only in the modern age and only after modern science had carried off the victory in its long and hard struggle against traditional metaphysics. It is a matter here, in other words, not only of the different attitude of the modern age, compared to that of the preceding centuries, to the questions of active and speculative life, of the domination of nature and of labor (not to mention the question of sovereignty), but also and above all of the downright structural contrasts between traditional metaphysics and modern science; their difference in thought form is also striking—and can be denied only on the basis of the unprovable assumption of the existence of a "higher thought." About these questions, which stood in the center during the long transition to the age of science and technology, Heidegger loses not a single word, and he also does not seem to be particularly well informed in this regard; the result is a picture of history (also of the history of Being) which, to remind us of Hegel, resembles a night in which all cows are black. — Second, Heidegger does not feel obliged to explain his normative statements or to underpin them by specifications of his ontology. He speaks of the "endangerment of the essence of man",¹³⁶¹ he laments cultural decay and massification, and finally he recommends that we distance ourselves from the attitude of representational thought, so that man and Being lose those determinations which metaphysics has given them, and "reach each other".¹³⁶² These and similar statements can be logically justified only on the basis of an ontologically ("essence") grounded hierarchy of values—Heidegger, however, wants to know nothing of a connection of his concept of Being with the traditional metaphysical-normative predicates (like *αγαθόν* or *bonum*). Therefore he cannot ultimately make plausible why Being has determined man to be its pious shepherd and not perhaps its ruthless or even suicidal master, therefore his warnings, laments, and recommendations hang in the norm-free air of Being. His Cassandra calls are not to be taken at face value, but must rather be understood as the expression of the tormented consciousness of an intelligentsia stratum that does not cope in the mass society of industry and technology due to its abilities and ambitions and therefore must hurl its "higher thought" against the allegedly narrow-minded "instrumental thought" in the anger of the misunderstood chosen one.

cc. The Positivist Metaphysics Criticism and its Paradoxical Outcome

Positivist metaphysics criticism of the 20th century could often create the (desired) impression that metaphysics criticism or even philosophy in general only really begins with it. In reality,

¹³⁶¹ *Platons Lehre*, 59.

¹³⁶² *Identität*, 19 f., 25 f.

the metaphysics-critical, but also the closely connected theoretical basic positions of Neo-Positivism reach far back. They contain an agnostic component (which with Wittgenstein even has fideistic features), and beyond that they rely on pragmatist and conventionalist ideas, whereby conventionalism here does not let the background-acting agnosticism appear clearly because the conventionally set limits of knowledge are declared to be limits of the world, from which it is then concluded that the world is knowable. Despite this artificial covering of agnosticism by a conventionalism that ignores its own fictitious character partly unsuspectingly, partly self-confidently, the inner connection of the two, indeed the logical necessity of the transition from agnosticism to conventionalism, can be guessed without difficulty: if one renounces as an agnostic the knowledge of the essence of things, one must assume that attainable knowledge contains a more or less strong conventional component as it were as a substitute for the missing knowledge of essence. Conventions such as logical or physical laws must summarize and hold together the manifoldness of appearances for knowledge if one cannot know how appearances are held together by the essence itself; if this substitution of (impossible) knowledge of essence by logical and physical conventions fails to appear, no systematic whole of knowledge can be built up. The transition from the older positivism, more strongly shaped by classical agnostic positions, to the Neo-Positivism of the 20th century presupposed, however, not only the elaboration of conventionalist views, but also the negatively related shattering of the old metaphysical whole into atoms (be they particles of matter or perceptions and sensations), which had to be combined anew—and much more freely than before—into a world or a worldview precisely through fictions or conventional constructions. This was the last phase of the old struggle for the dissolution of substance and its complete replacement by function.

The agnostic aspect of Comte's positivism is not covered by an elaborated conventionalism that identifies the conventional or heuristic-fictive with reality, at least the theoretically relevant one, in scientific self-confidence. On the other hand, it is also not shy and leaves no room for fideism; rather, it reminds of the aggressive agnosticism of the Enlightenment thinkers who declared their renunciation of the knowledge of the last things and thereby intimated that they wanted to leave to their theological-metaphysical opponents only plain nonsense. As Comte writes with an ironic undertone, the highest ambition of positive philosophy consists in the discovery of the laws of phenomena, but it regards as "nécessairement interdits à la raison humaine" all those sublime mysteries which the theologians unravel "avec une si admirable facilité jusque dans leurs moindres détails".¹³⁶³ A main feature of the positive phase in the development of the human mind, which follows the metaphysical phase, is precisely the insight into the impossibility of attaining absolute concepts, thus the renunciation of the knowledge of the

¹³⁶³ *Cours*, I, 8.

beginning and the destination of the universe as well as of the inner genetic causes of phenomena; now it is a matter of finding the "lois effectives," i.e., the invariable relations of succession and similarity, through the combined use of experience and reasoning.¹³⁶⁴ All theological-metaphysical absolute concepts are to be transformed by positive philosophy into relative ones, for the replacement of the search for the essence of things by the search for the laws of phenomena means that research is an open process and therefore its results are subject to constant revision.¹³⁶⁵ On the other hand, there is an important structural similarity between metaphysics and positive philosophy, which Comte himself indicates: just as metaphysics ultimately strives to trace the manifoldness of individual beings back to a single great entity like nature, so too positivism wants to subsume all observable cases under a "fait général"; the positivistically understood explanation of phenomena consists indeed in the establishment of relationships between individual phenomena and a few "faits généraux," which become fewer and fewer in the course of scientific progress.¹³⁶⁶ Thus positivism, in order to master the epistemologically unrepresentable chaos of individual appearances, had to put the lawfulness of appearance or the natural law in the place of the essential universal of old metaphysics despite all metaphysics criticism, whereby the tension between the general and the particular could not be eliminated.¹³⁶⁷

The inner connection between agnosticism and conventionalism explained above becomes noticeable in Comte's still shy and unreflected conventionalist approaches. Comte realizes that the thesis of the necessary ignorance of the essence of things, given simultaneous adherence to the idea of natural law, suggests the conclusion that natural laws are "constructed by us with external materials"; their accuracy can therefore be only approximative, yet it suffices completely with regard to the solely decisive criterion of our practical needs.¹³⁶⁸ Such thoughts were not substantially deepened in the positivist school, especially since the concern was still decisive to uncover the fictions of metaphysics and not perhaps to let one's own "positive" views fall under the suspicion of fiction. In this spirit, disciples of Comte like Littré defended the scientific nature of positive philosophy.¹³⁶⁹ In Germany, materialism took over largely those intellectual-historical functions since the middle of the 19th century which positivism fulfilled in France and partly also in England, and therefore a significant influence of positivist thought was absent here. Laas, who mainly represented the weak German positivism, referred not directly to

¹³⁶⁴ *Loc. cit.*, 4, 12.

¹³⁶⁵ *Loc. cit.*, IV, 237 f.

¹³⁶⁶ *Loc. cit.*, I, 4.

¹³⁶⁷ Cf. the remarks by Halder, *Aspekte*, 168 f.

¹³⁶⁸ *Système*, II, 32.

¹³⁶⁹ See above note 145.

Comte but to Mill.¹³⁷⁰ He deserves mention not because of any important insights into the conventionality of non-metaphysical knowledge, but because of his renunciation of the thing-in-itself, which forms the logical endpoint of radical positivist agnosticism. Laas considers the view that the thing-in-itself is indeed unknowable, but nevertheless *is*, as useless, albeit harmless; just as a relationship between this-world and beyond cannot be proven, so too every means is lacking to explain the necessity of a supersensible world. He also does not think much of the assumption of an unknowable thing-in-itself as object of feeling or faith; he attributes it to "feminine natures" who seek "noblest elevation and most beautiful consolation," but thereby can fall prey to fanaticism and bigotry.¹³⁷¹ The essential features of Platonic-idealistic or metaphysical thought, which appears in logic as realism, in epistemology as apriorism, nativism or rationalism, in ontology as spiritualism and teleology, are according to Laas the deductive procedure of a mathematical or scholastic kind, the inclination towards the Absolute, the assumption of apriori normative laws of reason according to which experience and action have to direct themselves, the doctrine of the autonomous activity of the spirit and the search for a transcendent more beautiful world.¹³⁷² What Platonic-metaphysical thought has actually offered so far is a naive projection of the spatio-temporal relationships of this world into the beyond as well as fantastic constructions that sprang not from necessities of thought but from the need for unity, especially since in view of the relational character of our knowledge the concept of a knowable absolute reality is contradictory in itself.¹³⁷³ Laas is of the firm conviction that he can counter the danger of skepticism, which seems to lurk in the empiricist-positivist view, with his theoretical means on both the moral-philosophical and the epistemological level.¹³⁷⁴ Such statements characterize the self-confidence of the positivism of that time, which also guides the pen of Pareto when he explains his methodical principles and thereby declares he would rather practice non-science in the manner of modern physics than science in the sense of Aristotle, i.e., metaphysics. In contrast to metaphysics, which starts from absolute principles to then come to concrete appearances, positive science starts from these latter to then establish (not absolute, but merely) general principles. Analytical treatment of phenomena by decomposing them into their simple components and empirical verification would put an end to empty theoretical disputes.¹³⁷⁵

¹³⁷⁰ *Idealismus und Positivismus*, I, 4 ff. More generally, Laas, who traces the metaphysical figure of thought back to "Platonism" (see below), understands himself as a continuator of the sensualist (not materialist) tradition of Protagoras, Plato's adversary.

¹³⁷¹ *Loc. cit.*, III, 689 ff.

¹³⁷² *Loc. cit.*, I, 105 ff.

¹³⁷³ *Loc. cit.*, III, 688 f.

¹³⁷⁴ *Loc. cit.*, II, 199 ff.; III, 15 ff., 241 ff.

¹³⁷⁵ *Trattato*, §§ 19–25; indicative for the continuity of anti-metaphysical motifs are Pareto's references to Condillac, see *loc. cit.*, § 471. Cf. below Sect. 4c.

It is easy to understand why the Kantian variant of agnosticism promotes conventionalist approaches more than the positivist one. Kant assigned the cognitive activity of the subject and the structure of the faculty of knowledge a much more important role in the constitution of the worldview than the positivists, and accordingly the cognitive and practical tasks of subjective creations, as conventions and fictions are, were directly or indirectly upgraded. Not by chance did the formation of Neo-Kantianism and the systematization of conventionalist and fictionalist viewpoints go hand in hand. Vaihinger rightly called Lange the decisive thinker in this development, and with equal right he also traced Nietzsche's relevant views back to the influence mediated by Lange and the (free) processing of Kantian thought.¹³⁷⁶ Among his most important like-minded people he mentioned, however, also Mach and the pragmatists,¹³⁷⁷ and indeed there is a logical connection between the pragmatist and the anti-metaphysical-phenomenalist orientation: on the basis of the pragmatist definitionally bound connection of knowing and acting, practically fruitful fictions appear more valuable than essential cognitions, which can only have a speculative character.¹³⁷⁸ Both among the empiriocritics and among the pragmatists, however, there is found alongside the (however understood) conventionalist also another approach, likewise pioneering for the Neo-Positivism of the 20th century; meant is the division of the metaphysical whole into irreducible elements carried out in different ways (respectively) and the detachment from the normative-ethical fundamental considerations of traditional metaphysics. Thus Mach connects his view of knowing as thought-economical processing of sensation material standing in the service of life needs with the demand to withdraw the character of substance from the "ideal thought-economical units" like Ego and Body, i.e., to regard them as complexes that should disintegrate into simple elements. Then, according to Mach's conviction, the opposition between Ego and World, Sensation or Appearance and Thing-in-itself would fall away, philosophical research would have as its object merely the connection of the elements with one another and the determination of functional relationships, and "all metaphysical questions"—regardless of "whether they are regarded only as currently insoluble or generally and forever as meaningless"—would be *eo ipso* eliminated.¹³⁷⁹

Avenarius makes the general prerequisites and implications of the elimination of metaphysics by empiriocritical means even clearer. Metaphysics is eliminated when the three "anthropomorphic apperceptions" are removed which influence experience by adding determinations not contained in the truly given; these are the mythological apperception, which grasps the truly given through the form of our entire being, the anthropopathic, which grasps it

¹³⁷⁶ *Philosophie des Als Ob*, 753 ff., 771 ff.; cf. below Sect. 4 d.

¹³⁷⁷ *Loc. cit.*, XIV–XV.

¹³⁷⁸ Cf. Halder, *Aspekte*, 170 f.

¹³⁷⁹ *Analyse*, 18, 4, 11, 18, 287; cf. *Erkenntnis*, esp. 12 f.

through forms of our feeling, and the intellectual-formal, which grasps it through certain forms of our understanding.¹³⁸⁰ The influencing of experience by these three anthropomorphic apperceptions occurs when philosophy, in its otherwise legitimate endeavor to collect what is common to all individual beings into a most general concept, hits upon the idea of going beyond what abstraction logically permits and seeking a progress to a "higher comprehension" in order to found, for instance, aesthetic or ethical views. Here it is overlooked that that which abstraction is supposed to exceed as a summary of what is common to all individual beings cannot open up anything new, but must always fall back under the already existing concept, whose scope it may be able to expand, without however being able to achieve a higher comprehension; for the height of comprehension is conditioned only by the degree of abstraction and not by ethical or aesthetic qualities.¹³⁸¹ Here the modern metaphysical principle is varied once more, according to which not the ontological status of an object or the *certitudo objecti*, but the methodical procedure should be decisive. On this basis Avenarius settles normative transcendence, and at the same time he establishes the program of scientific philosophy, which he defines as a scientific thought directed towards the totality. According to this, it differs from the individual sciences not by the peculiarity of its mode of thought, its procedure, or its object, but solely by the scope of the latter; the content of its object must, however, be found again in the respective objects of the individual sciences, albeit in indeterminate form, which is determined to the extent that the most general concepts of scientific philosophy elevate the individual scientific concepts into the general; for while (natural) science contains the world as concrete individual things, the philosophical concept embraces the world in the abstract forms of what is common to all individual things.¹³⁸²

The smashing of the metaphysical idea of the whole and the rejection of the ethically-normative determination of Being were also, albeit differently accented, at the center of pragmatist metaphysics criticism. When James designed his concept of a pluralistic universe, his polemical attention was directed above all to the monistic metaphysics of the 19th century, namely to Hegel and the English Hegelians, although he also refers to Fechner or Bergson. Accordingly, he views the fundamental philosophical questions from the perspective of the opposition between monism and pluralism—or intellectualism and empiricism: for monism and intellectualism go hand in hand, the former arises from the latter's belief in the logical closure of the whole or the world whole. What began with the false Socratic-Platonic assumption that we would recognize things through their definition ended in philosophical monstrosities, method became habit, and this a tyranny of words.¹³⁸³ Between the abstract claims of intellectualism and its actual

¹³⁸⁰ *Philosophie*, 38; cf. *Weltbegriff*, 52.

¹³⁸¹ *Philosophie*, 44 f.

¹³⁸² *Loc. cit.*, 29, 33. On the ideal of a scientific philosophy cf. above Sect. 3 of this chapter.

¹³⁸³ *Pluralistic Universe*, Works, IV, 99 f.

achievements yawns a gap, and its alleged theoretical achievements, such as dialectics, found no use in the highest of all known rational enterprises, i.e., in science, since this secured its progress through the setting up of hypotheses and the empirical testing of what was derived from these hypotheses. The scientific method is thus at the antipodes of intellectualism just as monism is opposed by an open pluralism, which says of the universe that there is nothing all-encompassing or dominating everything else here, but only individual things—and these are "with one another in many ways."¹³⁸⁴ The universe as a functional whole constitutes something quite different from the world whole of monism, which incidentally takes its ideal of unity ultimately from normative considerations, i.e., rather from the will than from the understanding: since unity is good, it should also be, and thought should support it by inventing the appropriate categorial apparatus; philosophy thereby becomes a passionate vision, and logic is subsequently offered to support the vision argumentatively.¹³⁸⁵ This predominance of the normative-volitive element in monistic metaphysics is grounded in the human need to dismiss what is disturbing as semblance by subjecting the unified world to a single reason and thus to gain a feeling of security. Therefore there will always be "absolutists," although the assumption of an Absolute cannot solve the problem of evil. For, as the example of metaphysics so vividly testifies, philosophy is an expression of human character, and the definitions of the universe constitute expressions of just as many reactions of human characters to it.¹³⁸⁶

Schiller also regards metaphysics as a paradoxical mixture of non-binding subjectivism and intellectualism raising universal claims. On the one hand, the character of metaphysical systems depends on the personality of their author, so that not even two different people can believe in one and the same metaphysics in the same sense,¹³⁸⁷ on the other hand, the aprioristic procedure and the drive for unity of intellectualism force such abstractions that an unbridgeable gap must yawn between them and the concrete facts; becoming and appearances remain unexplained or are even denied for the sake of the consistency of the system.¹³⁸⁸ Little remains of the unity dream of metaphysics as science of the final synthesis of all experience if one considers that the experiential data available to us are partly insufficient, partly isolated, so that they must be supplemented by conjectures or combined with one another; to this extent metaphysics is "the ideal completion of an image of reality which is rough-hewn and fragmentary".¹³⁸⁹ A unity in the metaphysical sense is finally out of the question for us because, due to our faculty of

¹³⁸⁴ *Loc. cit.*, 68 (cf. 86 ff.), 145.

¹³⁸⁵ *Loc. cit.*, 67, 81.

¹³⁸⁶ *Loc. cit.*, 55 ff., 14.

¹³⁸⁷ *Human Truths*, 178 ff.; *Studies*, 18 f.

¹³⁸⁸ *Riddles*, 157 f.; *Studies*, 226.

¹³⁸⁹ *Studies*, 17.

knowledge and our conditions of knowledge, we cannot meaningfully pose the question of the original truth and the original reality; we must realize that our truth and our worldview have emerged from a certain cognitive process and are subject to change.¹³⁹⁰ Unconscious subjectivism leads metaphysics to intellectualism and dreams of unity, the conscious realization of the subjectivity or historicity of knowledge leads, on the other hand, healthy philosophy to empiricism and pragmatic observation. From this, clarity or at least avoidance of superfluous complications is expected, but metaphysics can hardly escape confusion, especially because the subjective in it is bound to practical-moral, i.e., normative considerations. Dewey designates the confusion of natural and practical ends caused thereby as a basic feature and at the same time as a great evil of metaphysical philosophy. This denies all objects that seem to be evil and disturbing the status of the natural end, and then it arranges those objects to which it grants this status into a fixed hierarchical order; objects that are supposed to cause struggle, suffering, etc., are not regarded as natural ends, but as accidental and inexplicable deviations therefrom. Popular theology seals the whole construction by assuming a single final end according to which everything is directed.¹³⁹¹ Thus metaphysics has become, since its foundation by Plato and Aristotle and through its reformulation in the Middle Ages, the source and guarantor of moral and social values; its errors and prejudices are to be traced back to this.¹³⁹²

Rejection of the moral-normatively inspired interpretation of Being, smashing of the metaphysical idea of the whole and, in return, the setting up of the program of a scientific philosophy also characterize Russell's metaphysics criticism, whose work represents the last great philosophical station on the way leading to Neo-Positivism, indeed merging with this latter in many ways. Russell criticizes metaphysically oriented philosophy for using moral concepts as a key to understanding the world.¹³⁹³ It is convinced that the world must be morally satisfying and that human purposes stand in close relationship to the purposes of the universe; thereby it remains capable of satisfying psychic needs, as science can never do.¹³⁹⁴ From this point of view, it is not difficult to construct a metaphysical system: one only has to interpret the world in such a way that one's own hopes are fulfilled while those of the enemies are disappointed, and then refute all arguments that are supposed to prove the truth of another metaphysics.¹³⁹⁵ Every metaphysics must therefore yield a conflict-ridden mixture of mystical and scientific inclinations, corresponding to the two opposing basic dispositions in the temperament of the philosopher, who on the one hand wishes to believe in some general view

¹³⁹⁰ *Loc. cit.*, 432.

¹³⁹¹ *Experience and Nature*, LW, I, 38.

¹³⁹² *Reconstruction in Philosophy*, MW, XII, 89; "Tradition, Metaphysics and Morals", MW, XV, 18 f.

¹³⁹³ *Mysticism*, 98 ff.

¹³⁹⁴ *Loc. cit.*, 78 f., 30 f., 29.

¹³⁹⁵ *Idealism on the Defensive*, 106.

about the world and man, while on the other hand he can only believe in what well-founded arguments speak for; the more profound a philosopher is, the more complicated and subtle errors he must succumb to in order to reach the desired state of mental peace.¹³⁹⁶

Metaphysics does not differ from mysticism insofar as it considers "semblance" to be evil and "reality" to be good, asserts the possibility of intuitive grasping of this reality, must deny the existence of time or becoming, and finally assumes the unity of Being; to support this latter assumption, incidentally, various erroneous logics have been designed from Parmenides to Hegel.¹³⁹⁷ Russell declares unequivocally that he considers the philosophical and theological belief in the rational unity of the world to be "rubbish." For him the universe is "all spots and jumps, without unity, without continuity, without coherence or orderliness or any of the other properties that governesses love. Indeed there is little but prejudice and habit to be said for the view that there is a world at all".¹³⁹⁸ The loss of belief in the rational unity of the world impairs not only the theoretical claims of metaphysics but also those of science, which for a long time asserted similar things and to that extent replaced metaphysics; as a substitute for metaphysics, science dies off to live on as common sense.¹³⁹⁹ But precisely this scientific common sense makes plausible that there can be several possible hypotheses about the world and no method is available to us to decide for a single one of them and obtain metaphysical certainty.¹⁴⁰⁰ The inevitability of a piecemeal and tentative exploration of the world becomes even clearer when one has recognized the untenability of the metaphysical assumption that the explanation of a single thing would require the knowledge of the whole or the knowledge of all relations of the thing in question. The knowledge of relations does not *eo ipso* mean the knowledge of all relations and just as little does it offer certainty about the necessity of the relations with regard to the "nature" of a thing. In Russell's atomized universe, relations do not appear as necessary expressions of the essence of things and therefore they do not form a net that holds things together according to ontological necessities; rather they are temporary, non-essential combinations that can form almost arbitrarily, which is why they also often create the illusory impression of the existence of contradictions between the elements of the world—an impression that can only arise against the background of the belief in the unity of the world.¹⁴⁰¹ The atomization of the world goes so far that one may speak neither of a fixed net of ontologically necessary relations nor of two "aspects" of one and the same "thing"; these "aspects" are in

¹³⁹⁶ *Mysticism*, 1; *Unpopular Essays*, 64 f.

¹³⁹⁷ *Mysticism*, 9 ff., 18 f.

¹³⁹⁸ *Scientific Outlook*, 98.

¹³⁹⁹ *Loc. cit.*, 101 f.

¹⁴⁰⁰ *Logic*, 343.

¹⁴⁰¹ *Problems*, 141 ff.

reality independent events that must be considered accordingly, i.e., independently of the "thing".¹⁴⁰²

In contrast to metaphysical philosophy, science or scientific philosophy accepts the idea of unity only in the double sense of epistemological unity—which incidentally has a strongly conventional character insofar as it is grounded merely in the fact "that my experienced world is what *one* experience selects from the sum total of existence"—and that tentative and partial unity which manifests itself in the prevalence of scientific laws.¹⁴⁰³ The propositions of scientific philosophy are, unlike the propositions of the individual sciences, general, i.e., applicable to everything that exists or can exist. This does not mean, however, conceiving the universe as a uniform thing that can as such become the subject of predicates, but only that the mentioned propositions apply equally to all individual things, especially since they can neither be confirmed nor refuted by experience and to that extent hardly differ from the propositions of logic.¹⁴⁰⁴ Nevertheless, an aprioristic grasping or description of the universe remains impossible. Experience and aprioristic principles are rather constantly related to one another in the progress of knowledge, in that we start from observations or descriptions and come to conclusions through the connection of universals with one another. Philosophical knowledge thus coincides with scientific knowledge, only the critical function is more strongly pronounced in the former.¹⁴⁰⁵ The relationship of scientific philosophy and science consists, however, not only in the commonality of method, but also in the fact that the former works out the general results of the latter and tries to generalize and unify them even more. Results are, however, always provisional, if not misleading, one should rather rely on the reliability of the method.¹⁴⁰⁶

It cannot be said that the Neo-Positivists were clear about the philosophical and intellectual-historical backgrounds of their own metaphysics criticism—their statements are in any case, insofar as they relate to such questions, generally dilettantish and superficial. In the proud self-confidence of the first hour, when a veritable new foundation of philosophical thought in sovereign distancing from its misguided tradition was envisioned, Carnap was able to find "related thoughts" only among the nominalists, and these were again not conclusive enough for him.¹⁴⁰⁷ And when Neurath tried to summarize the progressive approaches and precedents from the philosophical past and thereby drew a long line reaching from Occam to Russell via the Enlightenment and modern science,¹⁴⁰⁸ he brought no concrete connections to

¹⁴⁰² *Analysis*, 248; cf. above note 15.

¹⁴⁰³ *Mysticism*, 101.

¹⁴⁰⁴ *Loc. cit.*, 110 ff.

¹⁴⁰⁵ *Problems*, 148 f.

¹⁴⁰⁶ *Mysticism*, 98.

¹⁴⁰⁷ *Überwindung*, 219 f.; cf. Hahn's reference to nominalism and Occam, *Superfluous Entities*, 7.

¹⁴⁰⁸ *Schriften*, II, 679 ff., cf. 880 ff.

light, but rather let himself be guided by the ambition to present Neo-Positivism as the culmination and completer of all previous noteworthy philosophical achievements. The Neo-Positivists would certainly have been surprised if one had wanted to prove to them that their metaphysics criticism contained not much new and in some respects had even been anticipated by thinkers like Nietzsche,¹⁴⁰⁹ whom they tended to regard as poets rather than philosophers. They would presumably also have been surprised if one had pointed out to them in particular the rather banal agnostic and conventionalist views on which their metaphysics-critical, but partly also their positive philosophical enterprise rested. We want to illuminate here the role of these views in the metaphysics-critical context and save the presentation of the linguistic and psychological-sociological metaphysics criticism of Neo-Positivism for the corresponding sections of this chapter. Neurath admitted in the 1930s¹⁴¹⁰ that neo-positivist psychological-sociological metaphysics criticism was still in its infancy, and since then not much has changed in this regard. The logical reasons for the metaphysical aberrations, which in his opinion were already better researched at that time, he saw on the one hand in the close tie of metaphysics to the form of traditional languages and on the other hand in the overvaluation of thought, which allegedly could lead to knowledge without experience or arrive at new contents from given facts through inference. Here we are obviously dealing with the old stereotypical intellectualism charge,¹⁴¹¹ whose reverse side was the confession to empiricism and agnosticism. The fact that the Neo-Positivists did not stay with traditional empiricism, but made systematic use of the possibilities of the new logic, may mean something for the constructive aspect of their enterprise. For the metaphysics-critical aspect of the same, which alone interests here, this is of no importance.

Research in recent decades, which took up its work after the collapse of the early almost apocalyptic hopes of Neo-Positivism and could share its self-understanding less and less, has brought out that the metaphysics criticism of the early Wittgenstein belongs together with philosophical positions which *prima vista* seem completely opposed to the neo-positivist ones. Thus, rightly, the commonalities of Wittgenstein's and Heidegger's questioning of metaphysics as theoretical-rational science as well as the consequences of such a questioning for the form and objective of philosophy have been pointed out: if Being or the Absolute cannot be stated, but can only show itself, then the object of empirically verifiable sentences can be merely certain beings occurring in the world, about which alone—and not about Being—the logic of our language permits meaningful statements.¹⁴¹² Whoever knows the long history of metaphysics

¹⁴⁰⁹ See Beth, *Mathematical Thought*, 176 ff.

¹⁴¹⁰ *Schriften*, I, 306.

¹⁴¹¹ Shlick even thought that a rationalist or intellectualist who did not practice metaphysics would be inconsistent — just as a metaphysically inclined empiricist, see *Probleme*, 47.

¹⁴¹² Apel, *Transformation*, I, esp. 228, 238, 251.

criticism as intellectualism criticism, however, will find such initially astonishing statements neither impressive nor groundbreaking. And just as little will he be surprised, mindful of the centuries-old alliance between this kind of metaphysics criticism and fideism, by the—today undisputed¹⁴¹³—presence of strong fideistic components in Wittgenstein's thought. Wittgenstein himself made clear that the famous final sentence of the "Tractatus" could quite well be interpreted in the religious sense, when he said a few years after its publication that he could "quite well imagine a religion in which there are no doctrinal propositions, in which therefore there is no speaking"; if there is speaking in religion, then this is not essential to it, but a component of the religious act. in the same context he confessed to the fideistic conviction that the will of God determines what is good, not the other way around.¹⁴¹⁴ The Unsayable or only Showable is indeed meaningless if one applies the empirical or logical truth standards—and we possess no others—, but it is not nonsensical, rather it comprises the most important thing in human life; precisely for this reason, life problems remain untouched by the discovery and proclamation of scientific truth.¹⁴¹⁵ The Unsayable can only show itself if one has said the Sayable with all possible clarity, and the mistake of metaphysics lay not so much in the choice of an unimportant object, but rather in the fact that it wanted to talk about an only showable object as one talks about empirical objects.¹⁴¹⁶ Wittgenstein accuses skepticism of nonsensicality "if it wants to doubt where one cannot ask";¹⁴¹⁷ here, however, skepticism in the religion-critical sense is obviously meant, and moreover the accusation does not affect that agnosticism which scientifically can neither affirm nor wants to doubt, but leaves the matter to faith. Such agnosticism is, however, for its part—as limit of thought—not a matter of faith, but a logical necessity; for the assumption of the Mystical, whose substantive determination must then be left to faith, is compelling, it imposes itself namely through the undeniable fact *that* the world is at all.¹⁴¹⁸

The just-forming neo-positivist party was initially frightened by certain oral utterances of Wittgenstein—such as that religion does not represent a childhood phenomenon in the history of mankind that will disappear with the progress of culture—and it needed some time until it became clear about the difference of standpoints.¹⁴¹⁹ Neurath found the final sentence of the "Tractatus" "at least linguistically misleading," since it sounds as if there were a Something of

¹⁴¹³ See summarily Baum, *Wittgenstein und die Religion*, esp. 295 ff.

¹⁴¹⁴ Waismann, *Notes*, 14, 13.

¹⁴¹⁵ *Tractatus*, 6.52. In the same spirit Wittgenstein criticized Frazer for making "primitive" views appear as errors that could be corrected rationally; "but it never becomes plausible that people do all that out of sheer stupidity" (*Bemerkungen*, 234, 235).

¹⁴¹⁶ Cf. the analysis by Fann, *Conception*, 25 ff., 32 f., 94.

¹⁴¹⁷ *Tractatus*, 6.51.

¹⁴¹⁸ *Loc. cit.*, 6.44.

¹⁴¹⁹ Carnap, *Autobiography*, 26 f.

which one could not speak; if one wants to abstain from any metaphysics, one should indeed be silent, but not "about Something".¹⁴²⁰ No concession could be made to agnosticism or skepticism on this point, for it was known that it can undermine science just as much as metaphysics and thus ultimately come to the aid of faith.¹⁴²¹ Since, according to the scientistic self-understanding of the Neo-Positivists, fideism could not provide a possibility beyond science, but only the enemy of a science that tolerated no intellectual competition beside itself in its missionary consciousness, it was not possible to see that Wittgenstein's two-dimensional position represented not (only) a personal whim, but the latest manifestation of an old intellectual-historical constellation, and since this position was logically at least legitimate, it could only be overcome or rather pushed aside by a logical leap or a decisionistic solution. This consisted in such a radicalization of the conventionalist approach that knowledge built on cognitive conventions raised a downright ontological claim, by identifying the limits of the world with the limits of the Knowable. The conventionalist component was not specifically highlighted or perceived at all precisely because of its overgrowth—and for the same reason one could also simply ignore agnosticism, which, as we know, had originally stood godfather to conventionalism and had remained in close connection with it until then. This was made possible conceptually by the tripartite division of sentences into true, false, and meaningless, which goes back to Russell,¹⁴²² whereby everything was designated as meaningless that seemed to burst the frame of the Knowable according to neo-positivist or conventional criteria. What was called unknowable by the agnostics was now called meaningless¹⁴²³—and precisely the assumption of the meaninglessness of everything that exceeds human cognitive ability permitted, at least psychologically, the mentioned identification of the limits of the world with the limits of the (linguistic, logical, or epistemological) cognitive convention.

The strong conventionalist component of Neo-Positivism becomes visible if one compares the neo-positivist approach with other conventionalisms that did not shy away from openly going along with agnosticism. We already spoke of Neo-Kantianism in this sense, and a brief reference to an important similarity between Kantian and positivist thought would be instructive because it is conditioned not so much by direct philosophical influences, but rather structurally. Just as the Kantian farewell to the metaphysical knowledge of the In-Itself, where conventional means of knowledge became unnecessary or finally superfluous, diverted the problem of knowledge into the question of the possibility and limits of human knowledge and thus of its fictitious or

¹⁴²⁰ *Schriften*, II, 535. Ramsey expressed the same reservation with the saying: "But what we can't say we can't say, and we can't whistle it either" (*Foundations*, 238).

¹⁴²¹ Neurath, *Schriften*, II, 674.

¹⁴²² Carnap, *Syntax*, § 38 = p. 99.

¹⁴²³ See e.g. Ayer, *Language*, 115 f.; cf. however 118, where Ayer refers to the negative agreement of his position with the fideistic one.

conventional character, so too with the positivists the question of knowledge posed itself as a question of the conditions of meaningful discourse; the distinction between the thing-in-itself and the categories of thought corresponded to that between objects and linguistic forms and the intertwining of worldview and thought mechanisms to that of worldview and linguistic functions.¹⁴²⁴ Linguistic theory thus replaced the old epistemology, and thereby the old epistemological subject disappeared; the distance between things and knowledge as well as the orientation of the problematic of knowledge towards the—however defined—prerequisites of knowledge remained, however. The positivist replacement of the old epistemology by linguistic theory, as it took shape under the now decisive influence of logical questionings, went hand in hand with a certain philosophical option. With Kant, the area of language was more extensive than that of experience (intelligibles like morality can be spoken of) and the area of thought correspondingly more extensive than that of language, with Wittgenstein, however, experience and language, language and thought are supposed to coincide.¹⁴²⁵ If the dividing line is no longer drawn between Thinkable and Unthinkable, but between Sayable and Unsayable, then the philosophical circle becomes even narrower than it had become anyway due to the renunciation of the knowledge of the thing-in-itself, and at the same time the contrast strengthens between the Sayable, which makes up this circle, and the Mystical, which now includes, besides theological questions, also ethical, aesthetic, or political ones. The limits of language and logic are declared to be limits of the world¹⁴²⁶—although Unsayable or Mystical continues to be assumed. This means that the Mystical, despite its admitted presence, is not included in the world, that thus this world can claim for itself to be the whole world only as a partial and to that extent also fictitious world. World is what can be grasped by the Sayable or by the system of logical sentences. Not the world lying outside us *in toto* is translated into the language of logic or into Sayable, but the reverse is the case, if one has the already finished system of science in mind: the construction of logic and language *is* the world. Through this identification, the conventional character of the thus created world is indeed suppressed, at least on the level of practical science or scientific philosophy, but it cannot be forgotten or not entirely; for Wittgenstein himself believes, e.g., that there is only a logical, no ontological necessity or that the "so-called laws of nature" are no explanations of natural phenomena.¹⁴²⁷

Schlick likewise opined that natural laws are assumptions to which the hypothetical character always adheres, since there can be no metaphysically understood correspondence between

¹⁴²⁴ Cf. Romanos, *Quine*, 23 f.

¹⁴²⁵ Cf. Peursen, *Wittgenstein*, 65, 68 f.

¹⁴²⁶ *Tractatus*, 5.6, 5.61.

¹⁴²⁷ *Loc. cit.*, 6.37, 6.371; cf. his critique of Frazer's view that primitives had absurd ideas about the course of nature: "Their knowledge of nature, if they wrote it down, would not differ fundamentally from ours. Only their magic is different" (*Bemerkungen*, 245).

thought and reality.¹⁴²⁸ Nevertheless, he wanted to know nothing of inaccessible and unexplored areas of reality and emphatically condemned agnosticism as a great obstacle in the path of science or philosophy. The (factual) commitment to conventionalism with simultaneous (nominal) rejection of agnosticism was only possible through the logical leap mentioned above, namely through the decisionistic identification of the Knowable or Sayable according to neo-positivist criteria with reality or the world simply. The thesis that there is a solution for all "real" problems, with which Schlick justifies his rejection of agnosticism, constitutes a disguise of the mentioned decisionistic identification in the language of a universally valid objective statement. For he writes subsequently, only empirical, no principled reasons stand in the way of the solution of problems; the principled cognitive difficulties are, however, eliminated not by the likewise principled assumption of the knowability of things, but by the fact that the naming of problems is identified with the naming of the method for their solution—which amounts, of course, to a tautology: real problems are soluble because only problems whose solubility has been proven by the naming of the method for their solution may be considered real. On the basis of this tautology, the assertion is then not difficult that a principally insoluble problem has no meaning and is therefore not a problem at all.¹⁴²⁹

The belonging together of knowledge and language, as asserted by Schlick, is grounded precisely in the conventional character of knowledge or in the tautological identification of soluble and real problems and the thereby effected elimination of those areas of reality which cannot be grasped in the form of such problems. For Schlick, knowledge is no mere substitute for the immediate presence of the described facts, it is not knowing (*Kennen*) or experiencing (*Erleben*), but expression, thus communication and language.¹⁴³⁰ Between knowing as content of experience and recognizing (*Erkennen*) there is an unbridgeable gap, for the qualitative and content-related in our experiences must remain eternally *privatim*; communicable and therefore recognizable are only formal relationships and forms, which is why the validity of knowledge can extend beyond the subjective. Metaphysics errs fundamentally because it wants to state ontologically and not merely conventionally-cognitively Real. It believes that it can transform experience directly into knowledge, represent the last content through forms, through statements, thus say the Unsayable. But it is not possible to express contents and materials, to absorb experiences into the Ego and make ideas, representations, and contents of consciousness out of them, as metaphysics wants. The wish to do this underlies the intuitive concept of knowledge of metaphysics. This wish is unfulfillable, for expressible are only forms and structures of experiences, not their contents, and therefore metaphysics falls away, not because

¹⁴²⁸ *Probleme*, 115.

¹⁴²⁹ *Aufsätze*, 370 f., 373 f.

¹⁴³⁰ *Probleme*, 99, 96 f.

of the impotence of human reason, but because the task it has set itself simply cannot exist.¹⁴³¹ Obviously, human reason is considered omnipotent here only because only that area is held to be relevant or real in which it can solve all riddles that it has formulated itself. Accordingly, metaphysics is reproached not so much for building castles in the air or the free invention of a transcendent, but rather for the attempt to express what is indeed real but not expressible and thus to fail to recognize the formal character of knowledge. Only a conventionalist and agnostic, however, may reproach metaphysics for such a thing.

The described decisionistic elimination of agnosticism by declaration of the (conventionally) Knowable as the sole reality is pursued most decisively by Carnap, who opposes the orthodox agnostic-anti-metaphysical argument of the limitedness of the human faculty of knowledge not with the (potential) omniscience of man, but with the thesis that what lies outside the human faculty of knowledge cannot yield a meaningful questioning, thus no object of knowledge anyway; a knowledge of a principally new kind is unattainable and even a higher being would only expand our knowledge quantitatively, since for us only that can be meaningful which corresponds to the nature of our faculty of knowledge.¹⁴³² The (Neo)Kantian-conventionalist background of this thesis becomes sharper when Carnap explains that not rational science, but only metaphysics speaks of reality independently of the knowing consciousness and a cognitive constitution system cannot take the metaphysical concept of reality as a basis¹⁴³³—it must therefore obviously be constructed with regard to the knowing consciousness. Carnap does not thematize the fundamental connection between knowing subject and constitution system indicated by himself, but precisely this factually continuously acting connection does not allow the constitution system to become a doctrine of essence in the metaphysical sense. In it, the question of how objects are in themselves does not arise at all, and just as little is an interpretation of the finding undertaken, which—unlike the scientific findings about the finding—would have to have a metaphysical character and is usually performed either by realization (real-positing) or substantialization; finally, the meaning of signs (and object signs) is also not of interest here, since it must amount to an indication of the essence. Science concerns itself solely with the truth or falsity of sentences or with the position of an object within the constitution system—assignment systems indicate function, not essential relation.¹⁴³⁴ Nothing else is meant basically by Carnap's later distinction between internal questions, in which the existence of entities within a linguistic framework, and external ones, in which the same is treated absolutely. External questions are, however, wrongly posed from the start, for to be real

¹⁴³¹ *Loc. cit.*, 282, 284; *Aufsätze*, 147, 36 f.

¹⁴³² *Überwindung*, 232 f.

¹⁴³³ *Aufbau*, § 176 = p. 246, 247.

¹⁴³⁴ *Loc. cit.*, §§ 161, 169, 59, 52, 21, 20 = pp. 221, 222, 235, 80, 72, 27, 26.

in the scientific sense means to be an element of the system.¹⁴³⁵ On the basis of the possibility admitted by Carnap to build up different, but logically equally legitimate constitution systems,¹⁴³⁶ it must be concluded from this that the concept of reality is highly conventional here, not least because of its functionalist stamp. Conventionalism and functionalism belong together logically and intellectual-historically in the same sense as conventionalism and agnosticism. For the primacy of function replaced, as also becomes clear in Carnap's expositions, the primacy of substance, but this was in turn factually eliminated precisely by the agnostic neutralization of essence or the thing-in-itself. Carnap contributed no new argument to the struggle against the metaphysical doctrine of essence, he simply pushed it aside and then went his way on the crutches of his constitution systems—just as a declared agnostic and conventionalist would do.

The same will to uncompromising scientificity which forced the Neo-Positivists in a logically problematic way to distance themselves from agnosticism and its fideistic implications also led them to the demand for complete scientification of philosophy, in the hope that thereby the anti-metaphysical intention would be better served. In this demand, the Neo-Positivists went further than Russell, and they did not even allow the concept and program of a scientific philosophy to pass; a philosophy as basic or universal science alongside or above the various fields of the One empirical science seemed superfluous to them.¹⁴³⁷ But even to the bringing about of the unified empirical science philosophy could hardly contribute according to their view, since the unification of the individual sciences can only be accomplished by scientific methods themselves (there are no others); science knows no internal limits, and therefore the wish is also alien to it to give up at a certain point and leave the rest to philosophy.¹⁴³⁸ The Queen of the Sciences can thus be no science herself, but only an activity that must accompany and permeate scientific work. This means that it has nothing to do with factual questions, which are investigated exclusively by the sciences; it constitutes a logical grammar which we use to describe reality, its sentences therefore have not factual but only linguistic character. The traditional philosophical questions, which can contribute hardly anything to the fulfillment of the function of philosophy understood in this way, must either disappear or transform themselves into normal scientific problems. That is possible, for there is no other reality than that which the sciences explore piecemeal, so there is no reality in the sense of a whole which only the philosopher could view as it were from a bird's eye view.¹⁴³⁹

¹⁴³⁵ *Empirismus*, 259 f.

¹⁴³⁶ *Syntax*, § 17 = p. 45.

¹⁴³⁷ Neurath, *Schriften*, I, 314.

¹⁴³⁸ Schlick, *Probleme*, 59 ff., 54.

¹⁴³⁹ Schlick, *Aufsätze*, 130 f., 392 f.; Ayer, *Language*, 57, 47.

The complete identification of philosophy and science aimed, of course, at a drastic removal of all metaphysical carcinomas from the body of philosophy. The conviction was that metaphysics, despite all claims to give answers where science must lay down its arms, actually does nothing other than explain an unknown X by an unknown Y (e.g., matter by spirit or the world by God), without being able to make plausible a real alternative to the scientific view of the world;¹⁴⁴⁰ the latest findings about the tautological character of logic implied moreover that no logical path leads from the sensory to the supersensory.¹⁴⁴¹ The reduction of philosophy to science was intended to serve not only the struggle against traditional metaphysics, but also that against the penetration of philosophical-metaphysical assumptions or hypotheses into empirical science. Neurath turned against those who opined that they needed "metaphysical meaningfulness" to remain capable of work, since precisely by means of such meaningfulnesses the translation of certain protocol sentences into others became possible.¹⁴⁴² The endeavor to achieve, besides the elimination of metaphysics, also the purification of science, had to effect a narrowing of the ideal, especially methodological basis of science; significantly, the most effective reactions that the neo-positivist program provoked were directed much less against its anti-metaphysical side, which incidentally was hardly original in content despite all radical tones, than against the looming danger of paralyzing science through rigorous scientificity. To eliminate "any" metaphysics, the Neo-Positivists had to expand the concept of metaphysics to the extent that they made science dependent on verification by immediate experience—and the objection that no discourse is possible without supra-empirical statements came not least from epistemologists who partly conceived the concept of experience more broadly, partly worked out the non-empirical components of scientific experience and hypothesis or theory formation. Their defense of "metaphysics," insofar as they used this word,¹⁴⁴³ resulted from the attempted correction of the epistemological and methodological weaknesses of Neo-Positivism, they had no mind for the old metaphysics and transcendence. Nevertheless, their criticism benefited the adherents of more orthodox conceptions of metaphysics, who undertook a rescue of the Transcendent (however vaguely this was understood) by pointing to the finding of the quasi-ubiquitous presence of the Supra-empirical or "Metaphysical" as well as to the inadequacies of the neo-positivist concept of experience. The criticisms of the neo-positivist program thus divide into two main groups, characteristic of the present constellation remains, however, the fact that the representatives of the second (and smaller) often have to translate their arguments into an epistemological language in order to help them be effective.

¹⁴⁴⁰ Nagel, *Sovereign Reason*, esp. 30.

¹⁴⁴¹ Hahn, *Superfluous Entities*, 7.

¹⁴⁴² *Schriften*, II, 595.

¹⁴⁴³ See above Sect. 3 of this chapter, last paragraphs.

The claim of Neo-Positivism to proceed as strict science and to make purely scientific statements about the world had to provoke, simply because of the emphasis placed on it, the objection that its own assumptions underlie empirically unverifiable, i.e., metaphysical principles as well as a (tacit) ontology.¹⁴⁴⁴ Since we are treating here neo-positivist metaphysics criticism and its unintended consequences, not the criticism of Neo-Positivism as such, we can go into this latter only to the extent that this appears necessary for our purposes. We will therefore not explain the mentioned objection in more detail, but touch upon the closely connected questions of verification and evidence, on which the dispute about the non-empirical or metaphysical prerequisites of science and about the function of the hypothetical or metaphysical in science ignited; on the validity of the proposed verification principle depended indeed the justifiability of the claim to scientificity as well as the outcome of the struggle against metaphysics. For the Neo-Positivists, verification was identical with the criterion of meaning, the verdict of meaninglessness thus hit all unverifiable statements, i.e., every value or norm philosophy and every speculative metaphysics that wants to work with pure thought or intuition, but also every metaphysics that indeed starts from experience, but wants to recognize what lies behind experience through inferences.¹⁴⁴⁵ The elimination of metaphysics is to take place on the one hand by tracing back all sentences to empirically verifiable elementary sentences, on the other hand by eliminating errors in logical syntax, by proving that metaphysical terms only appear in sentences that cannot be traced back to empirically verifiable elementary sentences, or that the rules of logical syntax are violated. Metaphysical sentences express neither empirical nor tautological (logical) truths and, since there are no other truths, they are meaningless. Linguistic analysis is thus undertaken simultaneously on the basis of empirical and logical criteria, authoritative—especially with regard to metaphysics criticism—remain however the former, for truth must ultimately rest on them, i.e., after observance of all logical rules. The practical impossibility of applying the empirical verification and meaning criterion in its original strict version without having to declare obviously meaningful scientific sentences meaningless forced first to its expansion by the assumption of an indirect empirical verification possibility,¹⁴⁴⁶ then however to its factual abandonment, as Carnap, leading the latent neo-positivist conventionalism to its consistent end, bound that criterion to a language system whose rules could be determined according to the tolerance principle (in plain text: decisionistically). If on the basis of the original version of the meaning criterion metaphysics could be eliminated, but science with generalization claim could no longer be operated, the reverse now occurred: it became possible in principle to draft a metaphysics without violating the formal

¹⁴⁴⁴ See on this from different standpoints: Weinberg, *Examination*, esp. 105 ff., 200 ff.; Feiblemann, *Inside*, 177 ff.; Bergmann, *Metaphysics*, esp. 51; Apel, *Transformation*, I, 230 ff.; Krampf, *Metaphysik*, 99 f., 103, 114; Quinton, *Nature*, 243 ff.

¹⁴⁴⁵ Carnap, *Überwindung*, 237.

¹⁴⁴⁶ Ayer, *Language*, 38, 13.

meaningfulness rules of the selected language system, whereby the dividing line between meaningful and meaningless ran no longer between science and metaphysics.¹⁴⁴⁷ Thus one finally had to concede that the meaning criterion indeed continues to apply to the critique of transcendence metaphysics and theology, but can logically justify no elimination of inductive metaphysics or even of natural theology and that no fixed border can be drawn between these latter and science if one distinguishes only between meaningfulness in general and the respective degree of specification of meaning.¹⁴⁴⁸ Many even did not shy away from self-denial by declaring: "to say that metaphysics is nonsense is nonsense," in order to praise in the same context the role of metaphysical theories as pioneers of science and as cultural shaping forces and to state that no great scientific discovery was made in exact accordance with the demand for impeccable clarity.¹⁴⁴⁹

To these late insights Neo-Positivists came not through the sovereign self-unfolding of their own thoughts, but under the pressure of massive criticism, which accompanied their enterprise from the first hour and influenced it positively or negatively to varying degrees. Criticized was not least the tautological character of neo-positivist metaphysics criticism, i.e., the fact that metaphysics was rather removed or eliminated than directly refuted, whereby the elimination took place on the basis of a decisionistic determination of meaning and meaningful discourse.¹⁴⁵⁰ The application of the verification principle to an area that was as it were predestined for it had to be felt as movement in a tautological circle,¹⁴⁵¹ so that one could even designate this methodic principle itself, in view of its close intertwining with (tacit) neo-positivist ontology, as a "peculiar metaphysical theory".¹⁴⁵² The impossibility of completely identifying verifiability and meaningfulness with one another¹⁴⁵³ became, in other words, increasingly clearer, and precisely the finding of the insurmountable asymmetry of the two concepts set the epistemological debate in motion which ended, contrary to the neo-positivist program, with a far-reaching rehabilitation of the concept of metaphysics, albeit in a purely immanent context. We will understand the course of this debate better if we recall certain important similarities of the arguments brought against neo-positivist views with those arguments which were used by epistemologists like Whewell against the positivist inductivism of that time and highlighted the

¹⁴⁴⁷ See Stegmüller, *Hauptströmungen*, 422 ff. (Carnap's criterion of meaning as "matter of decision"); Krauth, *Carnap*, esp. 144, 128. Carnap himself admitted in his later years that the problems of traditional metaphysics are often closely connected with logical and semantic questions and that the anti-metaphysical positions of the Vienna Circle were "often too general" (*Replies*, 933).

¹⁴⁴⁸ Feigl, *Some Major Issues*, 15.

¹⁴⁴⁹ Waismann, *How I see Philosophy*, esp. 486 ff., 464 f.

¹⁴⁵⁰ See e.g. Buchdahl, *Science and Met*, 71; Warnock, *Criticisms*, 128.

¹⁴⁵¹ Bowes, *Is Met. possible?*, 31 f., 103 ff.; cf. 23 ff., where Bowes shows that not logic as such, but only a specific logic based on specific pre-decisions can be anti-metaphysical.

¹⁴⁵² Wisdom, *Philosophy and Psychoanalysis*, esp. 54 ff.

¹⁴⁵³ On the logical reasons for this impossibility see summarily Erwin, *Concept*, 37 f.

role of hypothesis (formation) in scientific work and the history of science. Because of the neo-positivist binding of the meaning criterion to empirical verification, inductivism had to retain the upper hand, and therefore it was no coincidence that critics disputed the identification of the opposition between metaphysical and non-metaphysical with that between deduction and induction.¹⁴⁵⁴ The detachment of meaningfulness from induction led indeed to no resurrection of scholastic deductions, but it went hand in hand with a re-evaluation of the non-empirical or hypothetical or "metaphysical" from the superordinate view of science. In this form, the asymmetry of meaningfulness and empirical verifiability was no longer felt as an evil in the neo-positivist manner, but as a fruitful tension.¹⁴⁵⁵ Popper could designate the problem of meaningfulness as a pseudo-problem because he simultaneously distanced himself from inductivism and accordingly assessed positively the role of metaphysical theories or hypotheses for the development of science, while he missed the ability for hypothesis formation in neo-positivist language; the application of the meaningfulness criterion to metaphysics would accordingly stand in the way of scientific theories and progress, but not of thought structures such as rational theology. Moreover, he opined—obviously with regard to the tautological circle mentioned above—that the meaningfulness criteria, should they also make sense to metaphysicians, would have to be formulated for every consistent language and not only for that of the empirical sciences and that the inability of the Neo-Positivists to create the universal language of universal science made the meaningfulness charge against metaphysics invalid, since in the absence of such a language there was no standard by which meaningfulness could be measured.¹⁴⁵⁶ In place of the meaning criterion and the separation between meaningful science and meaningless metaphysics based on it, there appeared thus a flexible demarcation criterion as well as the assumption of meaningful non-analytical sentences, which could be divided into falsifiable or scientific and non-falsifiable or metaphysical. Obviously, "metaphysics" is understood here differently in each case, which Carnap also pointed out in an attempt to bring about a rapprochement of standpoints despite reservations about Popper's falsification principle by clarifying this ambiguity.¹⁴⁵⁷

¹⁴⁵⁴ Cf. Williams, *Metaphysical Arguments*, 51.

¹⁴⁵⁵ Already Stace wanted to replace the principle of verifiability with that of "experiencibility", according to which an empirically applicable proposition must always be held to be meaningful, regardless of whether it is of empirical origin; he added, of course, that sensory experience is not the only possible one (*Met. and Meaning*, esp. 426, 429). It must be mentioned, however, that the Neopositivists declared from the beginning that they would not reject intuitive non-analytical knowledge if it could be subsequently verified by empirical means (Neurath, *Schriften*, I, 307; Ayer, *Language*, 118).

¹⁴⁵⁶ *Conjectures*, 253–264, 270.

¹⁴⁵⁷ *Replies*, 877 ff.; cf. the analysis by Scheffler, *Anatomy*, esp. 137 ff., who also considers a rapprochement possible.

The discussion sparked by and through Popper continued and led, as we will see in this section, to strongly historicist-relativistic views that went far beyond what the "critical rationalist" was prepared to approve. First of all, however, it entailed an epistemological rehabilitation of metaphysics, as well as a differentiated consideration of its cognitive components¹⁴⁵⁸ and a greater readiness to describe the heuristic value of metaphysical thought games beyond the suspicion of meaninglessness or independently of it with friendly words.¹⁴⁵⁹ The debate about the problem of evidence also had a rehabilitating effect for metaphysics, although its general significance was smaller. Philosophers of different and not necessarily metaphysics-friendly directions had already appealed to evidence as the ultimate criterion of knowledge;¹⁴⁶⁰ the extensive enforcement of intuitionism and anti-intellectualist currents, under whatever signs, in the metaphysical camp around 1900 and after 1918, however, instilled in the Neo-Positivists a principled distrust of knowledge criteria that could be brought into proximity with intuition and unscientific irrationality. The neo-positivist struggle against metaphysics articulates itself under the concrete intellectual-historical circumstances of the time between the World Wars not least as a struggle against intuitionism and irrationalism, and precisely for this reason the rehabilitation of knowledge criteria like evidence and others, as a result of the impracticability of the consistent empiricist program, had to benefit the rehabilitation of metaphysics in this or that sense, directly or indirectly. As Stegmüller wrote, metaphysics can neither be eliminated nor clearly separated from empirical science on the basis of the evidence criterion; for the question of evidence poses itself in the same way both with regard to metaphysics and with regard to individual scientific knowledge, whose foundational problematic constantly raises metaphysical questions.¹⁴⁶¹ With all abolition of the separation between logic and experience or

¹⁴⁵⁸ So Watkins distinguishes e.g., who acknowledges the regulative influence of metaphysical theories on empirical science, four levels in them, i.e. a falsifiable and verifiable, a falsifiable and not verifiable, a not falsifiable but verifiable and finally a not falsifiable and not verifiable (*Confirmable...*, 344, 345 f.).

¹⁴⁵⁹ So Wisdom e.g., who views metaphysical (and generally philosophical) theories as riddles or paradoxes, which are useful precisely because of their paradox or falsity, by making us concern ourselves with what they can only treat falsely (*Philosophy and Psychoanalysis*, 176 f., 50; *Other Minds*, 265).

¹⁴⁶⁰ The recognition of evidence as a criterion of knowledge is implied in Russell's doctrine of the "instinctive beliefs", on which all our knowledge must rest (see *Problems*, Chap. 2, last paragraphs). Ewing shows that Moore supported his "metaphysical" statements, which are actually "common-sense propositions" like those about the existence of matter, ultimately by "an appeal to a kind of self-evidence" (*Moore*, 141, 144). Basically, the same appeal to evidence is present when a substantially differently oriented author like Nelson, who wants to build empirical science on firm metaphysical presuppositions or judgments, opines that these latter could only be grounded by an "immediate knowledge", which however is not an intuition; the error of previous epistemology consisted in the doctrine that the source of knowledge is either intuition or reflection, which led partly to blind empiricism, partly to logical-metaphysical dogmatism (see esp. "Die kritische Methode...", *GS*, I, 11, 47, 63; "Die Unmöglichkeit der Erkenntnistheorie", *GS*, II, 481 f., 459 ff., 463 f.; cf. the treatise: "Ist metaphysikfreie Naturwissenschaft möglich?", *GS*, III, esp. 272 ff.).

¹⁴⁶¹ *Metaphysik*, 106, 81, 19 f., cf. 264 ff.

analytical and synthetic knowledge, experiential knowledge requires an additional, i.e., metaphysical foundation, which is established precisely by evidence as well as by the belief in the continuity of language as a means of intersubjective understanding.¹⁴⁶² The paradox or hopelessness, if one will, of our knowledge lies in the fact that all our arguing rests on an uninterrupted appeal to evidences, although on the other hand the evidence problem is insoluble and belief in insight is a "pre-rational decision." All arguments for evidence represent a *circulus vitiosus* and all arguments against it a self-contradiction.¹⁴⁶³ This also manifests itself in the anti-metaphysical argumentation of the positivists, which factually cannot do without the appeal to evidence or without a "subjective-metaphysical evidence basis," if it is not to be a mere groundless resolution. Due to the undecidability of the evidence question, however, the positivist argumentation against metaphysics must remain meaningless, the metaphysical against positivism false. Metaphysics can only be combated by means of another metaphysics—and whoever wants to reject metaphysics must, in view of the indispensability of evidence, not want to have a say anywhere anymore.¹⁴⁶⁴

By refuting positivist metaphysics criticism with reference to the evidence question, Stegmüller must, precisely in order to fully achieve his goal, appropriate the positivist concept of metaphysics, i.e., attribute to it the same scope as the positivists and reject a narrow definition of the same limited to traditional transcendence metaphysics. Metaphysics ultimately means everything that transcends sentences about the immediately given; this makes understandable why the finding of the failure of positivist reductionism could be cited as an argument for the necessity of metaphysics.¹⁴⁶⁵ If metaphysics now encompasses the whole realm of the Supra-empirical, then the boundary between Logical or Scientific and Metaphysical blurs, and everything that lies beyond the immediately given appears cognitively homogeneous in its ideality.¹⁴⁶⁶ The theoretical difference between transcendence and immanence metaphysics as well as between this and the immanence-metaphysical statements of the empirical sciences remains indeed, nevertheless the unification of the Supra-empirical under the sign of the evidence principle makes the transitions leading to transcendence metaphysics much more permeable—especially when critics of positivism declare that metaphysics in all its forms, from the inherent ontology of science and parascientific philosophical ontology to purely speculative ontology, is equally unprovable for methodological reasons alone.¹⁴⁶⁷ Most of these critics

¹⁴⁶² *Loc. cit.*, 307, 270 f., 277.

¹⁴⁶³ *Loc. cit.*, 102 f., 103.

¹⁴⁶⁴ *Loc. cit.*, 95, 106, 386, 388.

¹⁴⁶⁵ *Loc. cit.*, 20, 28, 25, 44 f.

¹⁴⁶⁶ *Loc. cit.*, 30.

¹⁴⁶⁷ See e.g. Wisdom, *Philosophy and its Place*, 35, 81.

certainly did not wish for a restoration of transcendence metaphysics,¹⁴⁶⁸ yet those who harbored this wish, in whatever form, interpreted the results of the critique of positivism in their own sense and harnessed them for their own purposes. Thus *mutatis mutandis* the earlier constellation repeated itself, when alongside philosophers and epistemologists who pointed out against the old positivism the inadequacies of inductivism and the importance of hypothesis formation for the sciences, those reported who sought to give the finding of the necessity of the Supra-empirical in science a turn in favor of (transcendence) metaphysics and wanted to see basically only quantitative differences between these two kinds of exceeding experience.¹⁴⁶⁹

Metaphysical concepts developed after the Second World War with a polemic side glance at Neo-Positivism likewise started from findings about the constitutive importance of supra-empirical factors for all stages of knowledge, from sensory perception to scientific models. Emmett, for example, who placed great value on such findings,¹⁴⁷⁰ concluded from them that they thoroughly justify the construction of a metaphysics by means of an analogical procedure. Metaphysical theories are according to her view essentially analogical, specifically in the double sense of analogies of Being, which on the basis of empirical data and relationships want to say something about supra-empirical or transcendent reality, and of coordinating analogies, which seek to bring different types of experience into harmony with one another by subsuming them together under a central idea taken from the "spiritual." Metaphysical models keep the danger of subjectivism within limits through the striving for logical coherence, they are more comprehensive than scientific ones and can enable a cooperation of philosophy and religion for the achievement of ethical goals.¹⁴⁷¹ Other advocates of metaphysics also claimed the criterion of logical coherence for themselves, specifically as a sufficient truth criterion on a level on which empirical verification cannot come into question. The empirical meaning and truth criterion was moreover relativized by the theses that the concept of experience is more extensive than the concept of sensory experience, and statements originally based on experience were not always verifiable by experience; not only many theological, but also many scientific statements had no precise meaning according to neo-positivist standards and therefore no clear separation could be made between meaningful and meaningless statements¹⁴⁷². Apart from variations on

¹⁴⁶⁸ Cf. the manner in which e.g. Bowes, after a critique of neopositivist principles (see above note 431) and some explanations on the meaning of supra-empirical factors and evidence for the constitution of facts (*Is Met. possible?*, 63 ff., 67, 86), wants to keep the subsequently designed metaphysical program free from the assumption of a transcendent and understand the whole of reality as merely a functional unity (*loc. cit.*, 197, 155, 184, 16 f., 192).

¹⁴⁶⁹ See e.g. Volkelt, *Quellen*, 102 f., 97 ff.; cf. *Erfahrung*, 435 f., 444 f.

¹⁴⁷⁰ *The Nature*, 41 ff., 68 ff.

¹⁴⁷¹ *Loc. cit.*, 215, 200 f.

¹⁴⁷² Ewing, *The Necessity*, 151 ff., 146, 148.

these themes,¹⁴⁷³ moderate tendencies must be mentioned here which do not dismiss metaphysical theories as meaningless, but take them at face value and want to test them for their truth or falsity with theoretical or epistemological means, whereby they likewise point to structural or methodological commonalities between metaphysics and science in order to take away the odium of meaningfulness from metaphysics. As White opines, metaphysics and science share a three-stage procedure, i.e., they start from a concrete problem, they apply a general principle to its solution, and on this basis they then draw conclusions about the existence of non-empirical transcendent entities. Their differences from one another lie in the assessment of these very entities: for science they constitute a sufficient explanation, for metaphysics however a necessary one; science arrives at their assumption by combining empirical data with empirical laws, metaphysics however combines for this purpose empirical data with a necessary principle; for science prognosis is a truth criterion, for metaphysics not; and finally, science demands, in contrast to metaphysics, an empirical verification of the mentioned entities.¹⁴⁷⁴

Just as some argued the impossibility of recourse to pure empirie according to neo-positivist ideas and, conversely, the necessary intertwining of Empirical and Supra-empirical, of Objective and Subjective, of observation and theory, in order to base their defense of metaphysics on it, so others laid the same and similar assumptions as a basis to draw historicist and relativistic consequences from them. We mentioned what Popper replied to neo-positivist empiricism and inductivism. His own positions, however, remained attached to empiricism or the empiricist mode of thought insofar as he assumed the possibility of an empirical falsification of non-empirical hypotheses. To this one could reply in consistent continuation of the anti-positivist approach that the establishment of facts which could falsify a (metaphysical) hypothesis depends for its part on certain theoretical premises, thus presupposes the establishment of a theory. So finally theory fights against theory or worldview decision against worldview decision, and facts or falsifications and verifications are subjected to the logic of this struggle. Within the framework of such a view, one could rate the epistemological merits or services of metaphysics highly (which also benefited its more general epistemological rehabilitation in recent decades), but this did not constitute a consequence of a new reflection on metaphysical truth in the traditional sense, but on the contrary a concomitant of the direct or indirect displacement of the truth question by the insight into the relativity of worldviews and paradigms. The great debate about Kuhn's theory of scientific revolutions is well enough known and need not be reported here. It is only to be noted that such or similar views drew the logical conclusion from the refutation of Neo-Positivism from a non-metaphysical standpoint. This was already evident before the Second World War with pioneers such as Ludwig Fleck, who

¹⁴⁷³ See e.g. Agazzi, *Raum*, especially 152, 154.

¹⁴⁷⁴ *Methods*, 174 ff.

concentrated primarily on epistemological questions, but also with historically oriented authors like Collingwood, who started from an anti-positivist view of knowledge and science in order then to pose the question of metaphysics in the historical context and to legitimize epistemologically relevant metaphysics—but at the same time to relativize it in its truth claim. Positivists, according to Collingwood, adhere to a metaphysics unconscious to them by imagining scientific research as a collection of "facts" in an empirical way, which are then classified and interpreted by thought. In doing so, they overlook that facts are also historical categories and that thought or the attitude of thought already takes a decisive part at the level of fact collection; what they present as generalizations on the basis of facts or even as truths are in reality only their own absolute presuppositions.¹⁴⁷⁵ Metaphysics as science of pure Being is indeed impossible, and to that extent the positivists are right; it escapes them, however, that besides this false concept of metaphysics there is already a genuine one in Aristotle, according to which metaphysics means the science of the presuppositions that underlie normal science, i.e., systematic thinking about a certain area of experience.¹⁴⁷⁶ The acceptance of such a genuine concept of metaphysics does not mean for Collingwood, however, that metaphysics may proceed deductively or that the absolute presuppositions of science, of which it deals, have a supra-historical validity claim. Questions like: are absolute presuppositions true? on the basis of what proofs are they accepted? how can they be demonstrated? — are "nonsense" and "pseudo-metaphysics." Metaphysics can only be a historical science which investigates the problem of absolute presuppositions only with regard to a certain time and certain persons or groups (races, nations, classes). Metaphysics proceeds systematically, to be sure, but only in the sense as every historical discipline does so, it thus forms no closed system, but remains open and develops like other historical phenomena.¹⁴⁷⁷ The task of the historian or the historically thinking metaphysician consists consequently in the exploration of the change and succession of the mentioned absolute presuppositions; while the pseudo-metaphysician poses the question how we know whether something is true, the former asks about the conditions of origin of a view or about the manner in which a subject arrived at it.¹⁴⁷⁸

The relativistic view, within the framework of which metaphysics was viewed no longer with polemical vehemence, but rather with sober-pragmatic, albeit again by no means solidary eyes, took shape on the one hand in the described epistemological confrontation with Neo-Positivism and on the other hand as a result of the peripeteias of the "linguistic turn," when it turned out namely that the neo-positivist dream of the universal language of unified science could not be realized and that the irreducible manifoldness of language suggests an equally irreducible

¹⁴⁷⁵ *Essay*, 143 ff.

¹⁴⁷⁶ *Loc. cit.*, 169 f., 14, 11, 4, 41. On the reference to Aristotle in this sense cf. above note 120, 176, 243.

¹⁴⁷⁷ *Loc. cit.*, 47 f., 65 f.

¹⁴⁷⁸ *Loc. cit.*, 73, 151.

manifoldness of ways of speaking about the world. In other words: when the draft of the One Science without metaphysics collapsed, the view of the several possible paradigms arose, each of which must have its own metaphysical background; and when the empirically verifiable and logically impeccably constructed universal language disintegrated, one recognized in the fragments of language unavoidable fragmentations of world representation. Thus Quine's relativism is less the result of a historically oriented consideration of (scientific) worldviews and more a logical consequence of the rejection of the linguistic absolutism of linguistic-analytical philosophy.¹⁴⁷⁹ This comes to light when Quine e.g. questions Carnap's distinction between "internal" and "external" and shows the inevitability of paraphrase in "some antecedently familiar vocabulary," in order to subsequently explain that ontology must be relative in a double sense: the elucidation of a theory yields a sense only in relation to a "background theory" and only in relation to the choice of a certain way of translating one theory into the other.¹⁴⁸⁰ It is difficult, however, to keep such relativistic considerations within the limits of the linguistic, i.e., to refrain from any generalization in the direction of a theory of the relativity of worldviews. Quine factually adheres to such a one when he assures that physical objects and gods differ epistemologically only quantitatively from one another. Both kinds of entities "enter our conception only as cultural posits"—the myth of physical objects has merely proven more advantageous with regard to the elaboration of a manageable structure in the flux of experience.¹⁴⁸¹

Also with Goodman, relativism emerged from the opposition to the neo-positivist search for the ideal language (Goodman speaks in this context of "linguomorphism"), whose metaphysical prerequisite consisted in the belief that there are atomic objects corresponding to proper names, and atomic facts corresponding to atomic sentences. Against this, he emphasizes the dangers of confusing certain features of discourse with features of the world. The description of the world in discourse is not the world, and therefore the choice of another discourse amounts to the choice of another world. There are thus many different and equally true descriptions of the world, all of which contain conventional elements, and none of them can raise an exclusive claim to truth, since the others are likewise true in the same conventional sense. None among them indicates the way the world is, but each communicates a certain way the world is. The way the world is does not exist at all and consequently there cannot be the only true description of the same.¹⁴⁸² As the paradigmatic—and one must say, for all times—intellectual struggle between Sophistry and Plato has already made clear, relativism, perspectivism, and conventionalism form the only possible logically consistent answer to the claim of metaphysics

¹⁴⁷⁹ Cf. Romanos, *Quine*, 50.

¹⁴⁸⁰ *Ontological Relativity*, 52 ff., esp. 54 f.; cf. *Ways of Paradox*, esp. 120.

¹⁴⁸¹ *From a logical point of view*, 44.

¹⁴⁸² *Problems*, 24 f., 30 f.

to grasp Being in its unity through the work of an intellect at least potentially sublime above every perspective. In this respect, every consistent anti-metaphysical position must be anti-intellectualist and anti-idealist. Even those who today reject materialism from a relativistic standpoint do so in the conviction that it unreformably continues to raise the truth claims of traditional metaphysics, only in scientistic-modernized form. Thus Putnam, who wants to see in scientism one of the most dangerous contemporary tendencies, opines that materialism is a metaphysics, thus an attempt to describe the given constitution of the world. Its appeal lies in the fact that it appears to be a natural, empirically grounded metaphysics, since it allegedly is able to satisfy both our highest cognitive ambitions and our need for scientificity. Nevertheless, its fundamental assumptions, such as the correspondence theory of truth and the belief in causality, would rest on the conviction of the existence of a world finished once and for all and firmly structured, so that only a single theory freed from subjective perspectives could copy this world correctly. Against this, Putnam asserts with reference to the history of the sciences that there is no "single absolute version of 'the world'" and such a belief cannot be reconciled with science as an enterprise with empirical relevance.¹⁴⁸³

That was the paradoxical outcome of (neo)positivist metaphysics criticism. Through the radical tone of its negation and through the own positive knowledge claim behind it, it provoked strong, but different reactions; the most important among them intellectually came from a side that actually had no interest in the restoration of metaphysics, but disregarding this rehabilitated metaphysics epistemologically and could view even transcendence metaphysics in sober historical-pragmatic consideration without scientistic arrogance. This was of course by no means that restoration of which metaphysicians of pure water may have dreamed, but rather a fool's license granted by skeptics, thus an insecure one. These skeptics, however, themselves remained with an epistemological, theory-of-knowledge, or linguistic explanation of the plurality and relativity of world-images; that is, they did not uncover the deeper anthropological, cultural-philosophical, and historical dimension of the problem. Yet this is not a *philosophical* task in the narrower sense of the word; it can only form the aim and content of a multidimensional and value-free—that is, descriptive, decisionistic—theory.¹⁴⁸⁴

b. Language and Metaphysics

The continuity of linguistic metaphysics criticism from the Renaissance to the present day becomes visible in authors of the 19th century who build a bridge between the preceding thought achievements in this field and the approaches of our century, which are strongly overestimated in their originality. Paradigmatic in this sense are Gruppe's expositions on

¹⁴⁸³ *Why there isn't...*, 208, 210 ff.

¹⁴⁸⁴ See Kondylis, *Macht und Entscheidung*, esp. Chap. I.

metaphysical linguistic usage, which can often be read as (admittedly unconscious) repetition of the old humanistic or the Enlightenment-empiricist metaphysics criticism. The immediate occasion of his polemic against metaphysics is indeed Hegel's system, but for Gruppe Hegel is fundamentally someone who commits the errors of traditional metaphysics anew; accordingly, he looks back to the source of the evil, i.e., to Plato and Aristotle, and devotes, not unlike his predecessors since the 15th century, a large part of his main work to the refutation of Aristotelian doctrine of categories and syllogistic.¹⁴⁸⁵ To the essential metaphysical intellectualism, which believes it can develop knowledge from mere concepts, he opposes Bacon, modern natural science and its inductive procedure and demands "modifications and extensions of the Baconian method of empirical natural research," so that this could also be applied in the philosophical field.¹⁴⁸⁶

The successes of the empirical sciences are due, according to Gruppe, not least to the fact that "they have not used language for something it is not and cannot perform"; on the contrary, metaphysics has its reason "in the misunderstood nature of language," and only in the light of this realization can metaphysical errors be both understood and avoided.¹⁴⁸⁷ Gruppe's criticism revolves primarily around one point, i.e., around the inadmissible derivation of things and entities from hypostasized concepts. Every language needs general concepts, but these must never lose reference to certain things; it must, in other words, never be forgotten that linguistic formulas are "abbreviations and calculation advantages" or largely "auxiliary expressions" and that the question of reality has no meaning here at all. Metaphysicians, however, have always built their systems on the "nominal values" of concepts, and that is why they have come to "perversities" like that of Platonism, where the concepts originally introduced as auxiliary expressions are declared to be the Permanent and Eternal, while the things, from whose observation the concepts proceeded, are declared to be the Changing and Transitory.¹⁴⁸⁸ Moreover, Platonic dualism, which incidentally raises insurmountable epistemological and ontological difficulties,¹⁴⁸⁹ goes back to the failure to recognize the fact that concepts like "unity" and "multiplicity" just like "short" or "long" are relational concepts and change their meaning depending on the point of view. Nevertheless, language, in order to enable understanding, must hold on to opposites like "unity—multiplicity" or "short—long" in the abstract and rigid juxtaposition of these terms, from which, however, no hypostatization of the same may arise. Nevertheless, metaphysicians hypostasize concepts such as "simple," "unity," "difference," or

¹⁴⁸⁵ *Wendepunkt*, 121 ff., 140 ff.

¹⁴⁸⁶ *Loc. cit.*, 12 ff., 484. Gruppe considers the metaphysics critique of other recent philosophers like Locke, Kant, the Ideologues and Comte to be insufficient or half-hearted, *loc. cit.* 416 ff.

¹⁴⁸⁷ *Loc. cit.*, 444, 427, 97.

¹⁴⁸⁸ *Loc. cit.*, 98 ff. Intellectual-historically interesting is Gruppe's reference to Hobbes and his derivation of the *essentia separata* from the copula (104).

¹⁴⁸⁹ See on this *loc. cit.*, 402 ff.

"life," which are relative, and moreover they believe they could grasp the essence of their own hypostases through definitions and treat concepts before and independently of judgments.¹⁴⁹⁰ Generic concepts represent hypostases just as little as other general concepts, they constitute no divisions made by nature itself, but results of our compiling and comparing activity; they take shape inductively, thus on the basis of a successive series of judgments; they are relative for their part insofar as the same object can belong to quite different genera according to different considerations.¹⁴⁹¹ Finally, the central categories of traditional metaphysics, namely substance and accident, represent mere hypostases of the "linguistic sentence form" and have nothing to do with the operations of thought.¹⁴⁹²

On the basis of this diagnosis, Gruppe proposes a therapy that reminds directly of the relevant neo-positivist ideas of our century.¹⁴⁹³ He wants to distinguish Meaningful and Meaningless in philosophy from one another and bind philosophical work exclusively to the former. In his eyes, "by far the greater part" of the questions with which philosophy occupies itself are of the kind that one should never have gotten involved in them, "because they already include something ... absurd in themselves, thus allow no hope for a clever solution". Accordingly, it becomes the main task of philosophy "to solve difficulties which in fact do not exist at all, but which themselves only follow from the false method, from the unauthorized use of concepts".¹⁴⁹⁴ A good half-century after the publication of these lines, Runze, who also noted a much greater influence of the seductive "element of language" on the speculative than on the empirical sciences, opined that philosophical problems should be solved "immediately" with the help of linguistic analysis; otherwise the suspicion would exist that their formulation rests "either on misunderstanding or on conscious conceptual poetry".¹⁴⁹⁵ Approximately at the same time, Müller wanted to make materialist and spiritualist ontologies objectless by tracing them back to the false use of the words "matter" and "spirit." Thought should be studied "in language," concepts like "matter" and "spirit" should thus be investigated historically in order to determine their different meanings in different times. "The best and perhaps only satisfactory definition of a word is its history," and true philosophy consists precisely "in the correct definition of our words" and the "improvement of language" to be achieved thereby.¹⁴⁹⁶ This determination of the main philosophical tasks is grounded in the view that our sentences do not refer to what things

¹⁴⁹⁰ *Loc. cit.*, 131, 105 ff.

¹⁴⁹¹ *Loc. cit.*, 50 ff., 61, cf. 124 f.

¹⁴⁹² *Loc. cit.*, 118.

¹⁴⁹³ See on this Cloeren, *Heritage*, esp. 521 ff.; cf. in general Schmidt, *Sprach und Denken*, 80 ff., esp. 115 ff.

¹⁴⁹⁴ *Wendepunkt*, 410, 411.

¹⁴⁹⁵ *Bedeutung*, 261, 260.

¹⁴⁹⁶ *Das Denken*, 520 ff., 522 f., 530.

are, but only to what we know of things, and that therefore the highest and last form of our knowledge is nominal.¹⁴⁹⁷

Since roughly the last quarter of the 19th century, metaphysics criticism as language criticism becomes more general and systematic.¹⁴⁹⁸ Not by chance does this process accompany the formation of conventionalism or the search for and finding of fictions in knowledge: language is now recognized as the source of such fictions—regardless of whether these are classified as unavoidable modes of functioning of thought or as avoidable errors. This connection of conventionalism or functionalism and metaphysics-critical language analysis appears clearly in Nietzsche, who attributes to language the cultural function of having helped man to establish his own world by letting the belief in the reality of the knowledge of this same world arise by means of concepts and the names of things.¹⁴⁹⁹ Indeed, it is a question of self-preservation for man to escape the disorienting instability of becoming, i.e., to create for himself a fixed world of things; language meets this need, whose means cannot grasp becoming, but only express "Being".¹⁵⁰⁰ The "philosophical mythology" which lies "hidden in language" enables the assumption of (in themselves non-existent) equal characters and facts as well as the isolation of action-groups; through words and concepts things become simpler, separated from one another, and indivisible.¹⁵⁰¹ And not only that: "under the seduction of language (and the fundamental errors petrified in it)" all acting, which can be nothing other than itself, appears as conditioned by an actor and thus arises the idea of a subject, a will, and an ego as cause of things, which ultimately amounts to belief in God ("we are not getting rid of God because we still believe in grammar"); parallel to this and to the extent that all these fictions are held to be true knowledge of the world, "language metaphysics" combines with the assumption of a knowing reason, thus with a "reason prejudice," which to a certain extent "entangles" us in error, indeed "necessitates" us to error.¹⁵⁰² Life-necessary fictions and genuine solution of knowledge questions are thus two different things. However much language can promote and consolidate the former, it contributes hardly anything to the latter; one must on the contrary "stumble over stony eternalized words with every knowledge".¹⁵⁰³

¹⁴⁹⁷ *Loc. cit.*, 553.

¹⁴⁹⁸ Scattered or aphoristic remarks in this sense already existed often in various texts. Thus Spencer e.g. describes idealist ("anti-realistic") metaphysics as a "disease of language", in which language symbols are combined in such an "abnormal" way that they can no longer express ideas (*Principles of Psychology*, II, 502).

¹⁴⁹⁹ *Menschliches, Allzumenschliches*, I, § 11 = *Werke*, I, 453.

¹⁵⁰⁰ *Wille zur Macht*, § 715.

¹⁵⁰¹ *Menschliches, Allzumenschliches*, II, § 11 = *Werke*, I, 878 f.

¹⁵⁰² *Genealogie der Moral*, § 13; *Götzen-Dämmerung*, III, § 5 = *Werke*, II, 789, 959 f. Cf. *Wille zur Macht*, § 522.

¹⁵⁰³ *Morgenröte*, I, § 47 = *Werke*, I, 1045. Cf. in general Djurić, *Nietzsche*, 111.

Against a neo-Kantian, i.e., conventionalism-related background, Riehl warned against the "latent metaphysics" which is in every not yet critical science and consists in the tendency to use our concepts "beyond the true scope of their validity." Language promotes this tendency by transforming concepts of mere relations and limits of representation into a kind of entities or things through its "substantivistic form".¹⁵⁰⁴ The agnostic prerequisite or implication of this warning is not difficult to fathom: language must not by word and concept formation create the false impression that it thereby conveys knowledge of things in themselves. Mauthner also proceeded from an agnostic basic attitude, asserting that our only knowledge lies in language—and precisely this language is little suited for opening up the essence of reality.¹⁵⁰⁵ Accordingly, he wanted to show that basic concepts of philosophy and natural science (such as force, matter, natural law, necessity, evolution, purpose) or psychology (such as soul, parallelism of body and soul, the names of the various mental activities) represent figurative expressions and metaphors, not statements of essence.¹⁵⁰⁶ Almost at the same time James expressed the view that the words of metaphysics fulfilled the same function as primitive magic formulas; metaphysical research begins and ends with talk of principles, God, matter, or the Absolute, in which the solution of all riddles is sought.¹⁵⁰⁷ And Anatole France represented similar views in a small witty dialogue, in which he compared the ambiguous signs with which metaphysicians build their systems to those used by savages to express their feelings. Language cannot go beyond the limits of the senses, which are at the same time limits of our knowledge. The binding of language to sensory images thus remains constitutive and indissoluble, it is found even in the most abstract metaphysical concepts, which are subject no less than others to the "matérialisme fatal du vocabulaire." Their retranslation into their original meaning would reveal the paralogisms stuck in them and at the same time the whole "histoire naturelle" of metaphysical ideas, i.e., those "aventures extraordinaires" by which metaphysical concepts have completed the transition from the particular to the general and from the concrete to the abstract. Abstractions exist indeed also in science, but the exactness of scientific vocabulary is guaranteed by the reference of names to the respective empirical object designated. The metaphysical attempt to formulate abstract ideas, on the contrary, can only produce allegories, which awaken in metaphysicians the belief that they have risen above the world of appearances.¹⁵⁰⁸

With Russell, the critique of metaphysical language stood in the service of the negative side of his philosophical program, i.e., it underpinned the smashing of the metaphysical idea of the

¹⁵⁰⁴ *Über wissenschaftliche und nichtwiss. Philosophie, Studien*, 244.

¹⁵⁰⁵ *Beiträge*, III, 641.

¹⁵⁰⁶ *Loc. cit.*, III, 558 ff.; I, 281 ff. Following Mauthner, Kainz studied misleading substantivizations (e.g. time, will, soul, reason) and metaphors (psychophysical parallelism, reflection) in philosophical language, see *Sprachverführung*, 211 ff., 123 ff.

¹⁵⁰⁷ *Pragmatism, Works*, I, 31 f.

¹⁵⁰⁸ *Ariste et Polyphile*, esp. 513, 515, 516, 517, 519, 520 f., 525.

whole and the (new) dissolution of substance. Russell also draws the parallel between savages and metaphysicians, since both believe in a magical connection of things or persons and names with one another, whereby they forget the distinction between words and what is designated by them; only thus can they come to the conviction that the world would consist of substances and attributes because there are subjects and predicates in sentences.¹⁵⁰⁹ This conviction—which cannot be true simply because not all sentences exhibit such a structure—dominates traditional philosophy to a large extent, and not only its theory of substance but largely also that of the Absolute.¹⁵¹⁰ Language misleads here by the fact that words which symbolize relationships can take the form of nouns. If we want to describe the relationship "Caesar loves Brutus," for example, then we must use the noun "love," which grammatically belongs together with "Caesar" and "Brutus," so that the difference between a substance and a relationship is blurred. Attributes and relationships differ from substances precisely in that they indicate a structure and that they cannot be represented by any symbol in the state of isolation. Sentences in which attributes or relationships are spoken of are therefore only meaningful if they can be expressed in such a form in which the attribute is attributed and the relationship relates things to one another, so that the relationship of a word to its meaning becomes immediately recognizable by its classification in a certain class of words; otherwise language must fall prey to the confusing substantivistic way of speaking.¹⁵¹¹ "Pluralistic metaphysics," as Russell calls his own ontology following James, becomes plausible if it is shown that the assumption of the opposite would make an explanation of order impossible. It must be shown, however, not only that not all sentences belong to the type "buttercups are yellow," but also that this latter differs essentially from the type "this is yellow." Traditional metaphysics committed the double error of throwing both sentence types into the same pot and recognizing the former as the only valid one.¹⁵¹²

Language seduces not only through its syntax, but already through its vocabulary. Thus a word is used to designate more or less similar things without reflecting on whether these things actually have identical elements or aspects. If such word usage prevails, it must influence general habits of thought, and therefore it is assumed that a certain word stands for a certain object and moreover that this object is a universal should the word in question be an abstract noun or an adjective.¹⁵¹³ Words like "is" are useless and must not appear in the language of symbolic logic. "Existence" and "Being," as they are common in traditional metaphysics, constitute hypostases of certain meanings of the word "is," which does not belong to the

¹⁵⁰⁹ *Unpopular Essays*, 77 f.; *Analysis*, 239.

¹⁵¹⁰ *Logic*, 207.

¹⁵¹¹ *Loc. cit.*, 337 f.; *Analysis*, 243.

¹⁵¹² *Analysis*, 242.

¹⁵¹³ *Logic*, 331.

primary language; therefore "existence" and "Being" cannot be applied directly to objects.¹⁵¹⁴ So Russell returns to the basic motifs that have dominated linguistic metaphysics criticism since Lorenzo Valla, and he raises similar demands, above all that for purification of philosophical grammar from the errors and confusions in which traditional metaphysical problems and alleged results have their origin.¹⁵¹⁵

The neo-positivist critique of metaphysical language advocated, in agreement with the general strategy of the movement to declare metaphysics rather meaningless than to refute it directly, the view that the sentences of metaphysics are pseudo-sentences. The special interest of the Neo-Positivists in language problems stemmed in turn from their logical-mathematical training and orientation: if logic and mathematics are of exemplary exactness, then every language not formalizable according to this pattern must be designated as imprecise and misleading. Metaphysics must therefore use pseudo-sentences, for the two types of meaningful sentences (i.e., empirical sentences and analytical sentences or the formulas of logic and mathematics, which are not reality statements, yet serve for the transformation of such statements) cannot occur in it by definition—otherwise metaphysics would have to be science.¹⁵¹⁶ Because of their meaninglessness, metaphysical language comes off badly even in comparison to fairy tales, whose sentences after all only conflict with experience, not with logic.¹⁵¹⁷ Meaninglessness means here not that a sentence is false, but that it is no sentence at all, since only meaningful sentences can be false or true. Words have a meaning if their syntax is fixed and if their truth criterion, i.e., their reducibility to protocol sentences, is established. Accordingly, pseudo-sentences are those that contain meaningless words or were put together in a syntax-violating manner. It is not necessary here that grammatical errors be present; in any case grammatical and logical syntax do not coincide, the possibility of pseudo-sentences thus results from a logical defect of language.¹⁵¹⁸ Many words of metaphysics originally had an empirical meaning, which they have lost, however, to be used metaphorically in the metaphysical framework; in some cases metaphysicians create words, however, which are meaningless from the start.¹⁵¹⁹ A prime example of abuse of language is offered to us by the word "to be." Here an ambiguity exists (on the one hand "to be" serves as copula before a predicate, on the other hand as designation for existence) and moreover the meaning of existence is expressed by a verb, whereby the verbal form simulates a predicate where we have none. It is indeed common in

¹⁵¹⁴ *Inquiry*, 64 f.

¹⁵¹⁵ *Logic*, 342.

¹⁵¹⁶ Carnap, *Überwindung*, 221, 223 ff.

¹⁵¹⁷ *Loc. cit.*, 236, 238.

¹⁵¹⁸ *Loc. cit.*, 220, 221 f., 228, 229.

¹⁵¹⁹ *Loc. cit.*, 225, 230 f.

metaphysics that a sign which is no predicate is used as such or that a genuine predicate is added not to the appropriate subject but to one unsuitable for it.¹⁵²⁰

It is not our task here to judge the achievements of the Neo-Positivists in building a "scientific" or logical language. We are interested, in other words, not in what they made of what they considered meaningful sentences, but only their analysis of "pseudo-sentences." With regard to this, it must be said that they did not go significantly beyond what had been said in the distant and recent past in this regard, and also that they fixed themselves on a few basic motifs which are repeated again and again in their writings. Following Russell, they reject the grasping of the world suggested by language through simple subject-predicate structures and want their replacement by relational ones;¹⁵²¹ they reveal the confusion of existential and attributive sentences due to their formal identity and see in it a main source of temptations to pose imaginary questions about Being;¹⁵²² they reject the hypostatization of properties which occurs when we e.g. ascribe a certain color to an object as if this color had existed somewhere before;¹⁵²³ and just as little do they approve the hypostatization of genera or classes, which they—not unlike Nizolio, one must add—want to reduce to the bare sum of the objects contained therein.¹⁵²⁴ All these aberrations have now more or less to do with the inclination suggested by the linguistic form to seek a correspondence in the world of objects for every word of general meaning. According to Schlick, both scholastic realism and Platonism as well as opponents of psychologism like Frege and Husserl have fallen victim to such a fatal inclination. Since there are many words (such as individual names) that actually mean an object, one confuses the meaning of the words with their object; and when it is established that words can stand not only for a single object, but for each of many objects and simultaneously for many objects together, then one erroneously assumes like Plato that ideas were the existing object of a word. One should therefore investigate the meaning of a word in itself, without looking for an object designated by the word, one should thus not let become custom what actually applies in the case of individual names; for many nouns, such as "beauty," and for words such as "compare" or "perhaps" there is indeed no demonstrable object at all. From the search for objects that must correspond to word formation arises the concept of substance as well as the tradition-rich concept "semblance" (*Schein*), which is supposed to represent as it were the ontological equivalent of the false sentence in the same sense as true sentences relate to reality. Concepts form generally when words cease to be individual names, when they are thus surrounded by a kind of shadow or shimmer that differs from the narrower word core, i.e., from what the word

¹⁵²⁰ *Loc. cit.*, 233 f., 235.

¹⁵²¹ See e.g. Hahn, *Superfluous Entities*, 8.

¹⁵²² See e.g. Ayer, *Language*, 42 f.

¹⁵²³ See e.g. Hahn, *Superfluous Entities*, 7 f.

¹⁵²⁴ See e.g. *loc. cit.*, 176.

actually designates. Thereby words are substantialized and hypostasized into concepts, although "concept" might actually be only a mere name or a definition for the way we use a word; the use of a word constitutes its meaning, the meaning does not determine its use.¹⁵²⁵

The search for objects as necessary ontological correlates of words can also have disastrous effects when it concerns true existential sentences in negative form. A quite correct sentence like e.g.: "there is no object that stands for the word 'Nothing' in the same sense as the word 'Mr. S' for the actually existing Mr. S" can be misleading insofar as it drives one to search for an object that could correspond to the word "Nothing" in a sense other than the named one. The situation is similar with questions like e.g.: "Does the chair consist of our sense data or not?", which regardless of how they are answered, regardless thus of the realistic or idealistic options of the philosopher, lead to posing the problem of the What or of the ontological essence of things, and thus open the door wide to Platonism.¹⁵²⁶ Finally, the assumption of transcendent entities also leads to the gradual shift of linguistic usage, when words expand their original concrete sense by including experiences from other areas and allow supra-empirical hypostases such as "world," "reality," or "necessity" to arise from this conglomerate.¹⁵²⁷ A metaphysician who is hindered in the formulation of his conclusions by the prevailing linguistic usage expands or modifies the same, whereby he makes sentences possible which could not be formulated before; the creation of new linguistic conventions is incidentally favored by the already existing great freedoms in normal linguistic usage as well as by the fact that formal logical rules need not be violated thereby.¹⁵²⁸

¹⁵²⁵ Schlick, *Probleme*, 132 ff. The same can be read almost *ipsis verbis* in Ayer, *Language*, 43, 42, or Waismann, *Principles*, 81 f. Ogden and Richards also considered the assumption that there are direct meaning relations between words and things to be the source of almost all difficulties of thought. To eliminate them, they developed a theory of symbols or language symbols, in which the symbol indeed symbolizes a thought (or reference), but without necessarily relating to an object (or referent); the fundamental separation of "word" and "referent" is intended precisely to refute the mentioned meaning relation. Within the framework of this theory, symbolism rules were formulated to avoid the hypostatization of "fictitious referents", following the nominalist principle that only the How, not the What of the "referents" is recognized (*Meaning*, esp. 11 f., 87 ff., 82). Ogden and Richards incidentally defined metaphysics as a form of metaphorical use of symbols or that "orgy of verbomania" to which the metaphysician indulges in order to give his own symbols arbitrary content and thereby effect the desired "affective resonance" (*loc. cit.*, 40 ff.).

¹⁵²⁶ Waismann, *Principles*, 83; cf. Hahn, *Superfluous Entities*, 9.

¹⁵²⁷ Waismann, *Principles*, 85 f.

¹⁵²⁸ Ambrose, *Essays*, 258 f., 287. Let us remember, however, Hanson's objection against the formal-logical validity of metaphysical arguments, which according to his view are "trans-type", i.e. must mix different logical types by transitioning from necessary sentences to contingent ones (or vice versa). Informative inferences from a contingent sentence to another, likewise contingent one, are the business of science, inferences from a necessary sentence to a necessary one are again the business of the logician. There remains, therefore, no other area for metaphysical argumentation than the one in which logically

In a noted treatise, Ryle attempted to codify the systematically misleading expressions so called by him, and in doing so he highlighted as their common feature that they all suggest the existence of new kinds of objects and seduce us to multiply entities against Occam's commandment. Here sentences that mean nothing, but look grammatically like sentences that mean something, are constructed as if they actually had meaning. To avoid this error, the content of the expressions in question should be formulated in sentences of a quite different grammatical form, for despite all similarity or even identity of content, a certain grammatical form can mislead more than another.¹⁵²⁹ Systematically misleading expressions can now be subdivided into three large classes. The first of these comprises quasi-ontological statements, which are indeed neither false nor contain ambiguous or vague words, yet formally are not suitable for the facts of that logical form which they are supposed to express, but for facts of a quite different logical form. The grammatical predicate seems here not to mean the possession of a certain feature, but that of a certain status—an appearance that is of purely grammatical origin and can be remedied by the reformulation of such statements into sentences without quasi-ontological predicates. Furthermore, the grammatical subject seems here to refer to something as that which is predicated by the quasi-ontological predicate. The term designating the subject is, however, in reality a hidden predicative expression, and therefore the content can be reformulated into sentences that do not refer to the subject at all. The greatest sinners in the field of quasi-ontological statements are of course metaphysicians who make a subject out of "reality" or "Being" and a predicate out of "real".¹⁵³⁰ But also the second class of systematically misleading expressions goes to the account of metaphysicians, as its name already indicates. These "quasi-Platonic" statements seem to refer to universals, yet their analysis shows that general terms can in reality never represent the names of subjects or attributes (thus the sentence: "Color implies extension" can be replaced by the sentence: "Everything colored is extended"). Generic names and adjectives are not proper names, which is why we may also not speak of such objects that would be called, for instance, "equality," "justice," or "progress".¹⁵³¹ Finally, the third of the above-mentioned classes comprises the quasi-referential "the"-statements. Since the article points by itself to a certain object, it is assumed that everything that can be provided with an article refers to an object. In contrast, one can replace such nouns with verbs (e.g., "to think" instead of "the thought") and thereby avoid reference to entities. The meaning of a word need not necessarily correspond to an object; some statements

impermissible transitions from the contingent to the necessary (or vice versa) take place, as is the case with the ontological proof of God (*Impossibility*, 222, 224).

¹⁵²⁹ *Systematically Misleading Expressions*, 60 f.

¹⁵³⁰ *Loc. cit.*, 47, 45.

¹⁵³¹ *Loc. cit.*, 48.

containing words provided with articles in a characteristic way are only grammatically, not functionally similar to descriptive statements that are used referentially.¹⁵³²

The linguistic metaphysics criticism of the Neo-Positivists was originally based on the conviction that the construction of an exact language was possible, which apart from its constructive tasks would provide the standard by which the full extent of the aberrations of metaphysical language could be measured and made visible. The conviction contained, as we know, a strong conventionalist component, but since on the other hand one did not want to pay homage to the usual agnosticism and identified the limits of (exact) language with the limits of the (scientific) world, the old belief in the isomorphism between adequate expression and reality seemed to be restored; understood in this way, it is not wrong to designate Wittgenstein's first writing as a high point in the tradition of Western linguistic logic, which assumed the correspondence of *vox* and *res*.¹⁵³³ When the early Wittgenstein traced the nonsensicality of philosophical questions back to our lack of understanding of the logic of language,¹⁵³⁴ he had in mind the above-mentioned ideal language standard, according to which meaningful philosophical endeavor should direct itself. From the perspective of this criterion, as it appeared at the time fixed, metaphysics could be classified as "a kind of magic," if magic for its part rests on the idea of symbolism and language.¹⁵³⁵ The turn in Wittgenstein's intellectual development takes place through the insight into the downright metaphysical presupposition of his own early position, namely that there could be an isomorphism between (ideal) language and reality. To the extent that this position proves to be a new variation of old metaphysical convictions and the consequences of viewing our grammar as it were as a projection of reality become conscious, (real) language is also judged pragmatically and flexibly, i.e., in its connection with the needs of action, which often makes linguistic conventions necessary, indeed logically indispensable. The concern for drawing the boundary between Sayable and Unsayable continues undiminished; but while initially it was about the One (ideal) language and therefore about the One, once and for all established boundary, it is now about several forms of boundary drawing, which also leads to a certain weakening of the original distinction between Meaningful and Meaningless.¹⁵³⁶

Wittgenstein expressly acknowledged that the attempt to reproduce the structures of the world in a logically structured language had a metaphysical character. For it implies the double belief that under the common linguistic usage there is a fixed essence of language and this essence of language could in turn be brought into exact harmony with logic as the essence of thought; two

¹⁵³² *Loc. cit.*, 52 ff.

¹⁵³³ Thus Apel, *Transformation*, I, 254. More problematic is Apel's parallel between Heidegger's existential hermeneutics and Wittgenstein's later analysis of language games as forms of life (*loc. cit.*, 258, 262 ff.).

¹⁵³⁴ *Tractatus*, 4.003.

¹⁵³⁵ *Bemerkungen*, 233, 237.

¹⁵³⁶ Cf. the apt analyses by Hacker, *Insight*, esp. 185 ff., and Fann, *Conception*, 83.

ideal essences would thus meet harmoniously on an ideal level, whereby the whole enterprise would stand under the sign of the traditional metaphysical juxtaposition of logically structured essence and more or less chaotic-seeming appearance.¹⁵³⁷ In view of the structural similarity between logical-linguistic and metaphysical approach, the tendency of philosophy to follow the model of physics or mathematics forms no guarantee against metaphysics, but on the contrary its "true source." For precisely this tendency drives philosophy to seek the General in different forms of the Particular, to subsume the forms of the Particular under the General and generally to think that the General says or is worth more than the Particular. Philosophy should therefore proceed purely descriptively and guard against reducing something to something else; and language should also not be compared consciously or unconsciously with a calculus.¹⁵³⁸ Metaphysics inhabits the grammar of language to the extent that this suggests a "harmony between thought and reality",¹⁵³⁹ on the other hand, however, it arises from the drive of man "to run against the limits of language"¹⁵⁴⁰ and thereby to neglect the actual use of language or to search outside this use for the solution of questions that dissolve into thin air within the framework of normal linguistic usage. Unable to grasp and apply this usage completely, the philosopher seeks to redeem himself from that disquiet or confusion which lies at the root of philosophical questioning by a certain change of his mode of expression.¹⁵⁴¹ Since he does not understand the use of words, he interprets the misunderstood *linguistic* aspect as an expression of a strange but actual *process* and imagines e.g. time as a medium or the soul as an essence.¹⁵⁴² The misunderstood is thus hypostasized, and therefore only understanding and insight can prevent or dissolve hypostatization. They are granted to us when we find out "under what special circumstances" one actually uses an expression or sentence.¹⁵⁴³

In reality, Wittgenstein's call to lead words back from their metaphysical to their everyday use¹⁵⁴⁴ raises more problems than it solves. Wittgenstein admits himself that the words used by the metaphysician can just as well be used to express empirical facts (hence the possibility of a formal similarity between metaphysical and experimental statements), and moreover that the metaphysician opposes knowingly or not not merely the normal use of a word but also the criteria underlying this use.¹⁵⁴⁵ From this follows, however, that the metaphysics critic for his

¹⁵³⁷ *Philos. Untersuchungen*, §§ 91 ff.

¹⁵³⁸ *Blue Book*, 17, 18, 25.

¹⁵³⁹ *Philos. Grammatik*, § 112.

¹⁵⁴⁰ Waismann, *Notes*, 12. In this place Kierkegaard and his "running up against the paradox" are mentioned.

¹⁵⁴¹ *Philos. Grammatik*, § 141.

¹⁵⁴² *Philos. Untersuchungen*, § 196.

¹⁵⁴³ *Loc. cit.*, § 117, cf. § 340; see already *Blue Book*, 56 f.

¹⁵⁴⁴ *Philos. Untersuchungen*, § 116.

¹⁵⁴⁵ *Blue Book*, 57, 55.

part must assert his own (substantive) criteria in order to convincingly cancel the formal or linguistic similarity between metaphysical and experimental statements and bring about a linguistic form that does justice to the difference of criteria. Even if we wanted to assume that the return to normal linguistic usage would in itself take care of the elimination of metaphysics, we must perform work to enable this return that is not (or not only) of a linguistic character, but consists in an immanent confrontation with substantive questions; the clarification of content remains under all circumstances the criterion of correct linguistic usage, and this implies in turn that philosophy cannot live only from reflection on "language." The difficulties for the language philosopher who wants to lead the language of metaphysics back to the language of everyday life do not end there, however. For, should it turn out that metaphysical components or aberrations are implicit already in everyday linguistic usage, then the return to it would merely mean committing now only the errors of everyday, not of specifically metaphysical linguistic usage. The impression is created that "everyday" language (whatever that may mean) would contain no ambiguities, no hypostases and other "metaphysical" defects and could serve as a model for the exact use of words. Wittgenstein demands, however, not merely the return of words from their metaphysical to their everyday use, but also the clarification of existing linguistic usage,¹⁵⁴⁶ which can only mean that the latter is not free from misleading ambiguities. This reduces indeed the distance between metaphysical and everyday language and revives the original neo-positivist desideratum of an ideal language. For only by means of the ideal language can the existing one be clarified—and precisely the finding of the unclearness of the existing one had called the need for an ideal one into life.

When Wittgenstein writes that the problems arising through a misinterpretation of our language forms are "deep rooted in us as the forms of our language"¹⁵⁴⁷, he contradicts himself (for, if the problems are deep rooted in us and are intertwined with the forms of language equally deep rooted in us, then they do not have to arise first through misinterpretation) and unintentionally exposes the ambivalence of his standpoint. The assumption of a simultaneous and equally deep rootedness of language forms and metaphysical questions in us would actually satisfy metaphysicians who think that every statement about the world is already metaphysical because of the (wise) structure of language (see below), metaphysics therefore can neither be overcome nor screwed back to "everyday life" and the elementary needs of its "rough ground".¹⁵⁴⁸ The return to everyday language or remaining with it would consequently eliminate or prevent possibly only the grossest abuses, but little would change in the essential as long as people seek to understand each other in the state of a developed culture. Incidentally, Wittgenstein's juxtaposition of factual or everyday and philosophical or metaphysical linguistic

¹⁵⁴⁶ *Philos. Grammatik*, § 72.

¹⁵⁴⁷ *Philos. Untersuchungen*, § 111.

¹⁵⁴⁸ Thus Wittgenstein, *loc. cit.*, §§ 106, 107.

usage is introduced rather axiomatically-abstractly and not underpinned by concrete and systematic analyses of the language of the philosophical tradition; thus it remains unclear where the fatal or (in the reverse direction) saving border runs. Such analyses would presumably reveal that the transitions, if they must take place at all, are extremely fluid and that "everyday" and "metaphysical" word uses often mix with one another. In any case, it would have become clear that detachment from "normal" linguistic usage in itself cannot yield a sufficient reason for the emergence of metaphysical problems and theories. This brings us to a main defect of Wittgenstein's metaphysics-critical thought. He never consistently asked himself what generates metaphysical speculation in all its diversity, or, seen in his perspective, what constantly drives people to run against the limits of language; attributing this to a "drive" is admittedly a tautology providing little insight. Had he asked himself such things, he would perhaps have had to establish how much the same factors that drive beyond the limits of everyday language also work within these limits. (Traditional) metaphysics might accordingly represent only the philosophical variation of a much more general structural feature of language rooted in extra-linguistic causes. As a philosopher, Wittgenstein was, however, primarily interested in the polemic against certain colleagues, and in doing so he sought the unphilosophical-everyday as an ally, without noticing that in the state of culture the innocence of the "rough ground" is lost forever in all fields of the ideal.

The neo-positivist dogma of meaninglessness was grounded in the downright metaphysical belief that there is "the" language with a logic immanent to it, and had finally to turn not only against the language of metaphysics, but also against all human linguistic intercourse.¹⁵⁴⁹ Even after the turning away from this dogma carried out by Wittgenstein, however, what has often been called "linguistic absolutism" persisted, specifically in the form of the (rather naive-seeming) idea that "language" is as it were an autonomous entity or structure which in its own motion sets errors, misunderstandings, and optical illusions into the world. This idea concretized itself in the not particularly successful attempt to concentrate analysis on linguistic usage and push aside questions of meaning,¹⁵⁵⁰ which was in turn an aspect of the more general endeavor to separate language and fact analysis or linguistic and ontological questioning. From this arose on the one hand a conception of truth and meaning that competes in formalism with the coherence theories of traditional idealism,¹⁵⁵¹ and on the other hand a new scholasticism that lost itself no less than the old in subtleties and hair-splitting—a state of affairs which is meanwhile lamented even by prominent representatives of the neo-positivist movement.¹⁵⁵²

¹⁵⁴⁹ Stegmüller, *Metaphysik*, 54 f., 58.

¹⁵⁵⁰ Cf. on this the critical remarks by Bowes, *Is Metaphysics possible?*, esp. 40, 44.

¹⁵⁵¹ Cf. Romanos, *Quine*, 182, cf. 39, 80.

¹⁵⁵² Ayer, *The Concept*, ch. 1. Cf. Russell's remarks on the necessity of a connection of the study of language structures with that of the structures of the world (*Inquiry*, 341).

Alongside the growing insight into the impossibility of language criticism apart from ontological standpoints, it became increasingly clear how little the interpretation of metaphysics as aberration of language can explain function and history of the metaphysical phenomenon. In particular, it cannot be made understandable why a metaphysical theory, which is supposed to be mere linguistic renewal or confusion, can provide the anticipating draft of a scientific theory that can be at least partially empirically verified or is even capable of "saving the phenomena," why there are competing metaphysical theories and why the shape of the dominant metaphysics changes from time to time, finally why metaphysical questions do not die out although the linguistic aberrations to which they are supposed to owe their origin are uncovered.¹⁵⁵³ The fact that metaphysics goes hand in hand with a deviation from "normal" linguistic usage does not therefore allow the conclusion of a constitutive role of this deviation in the formation of metaphysical theories; on the contrary, linguistic renewals are usually the expression of different theoretical stances whose motivation is to be sought in other areas.¹⁵⁵⁴ Only in their intertwining with the non-linguistic sources of philosophy, which of course also flow outside philosophy, i.e., spring from human life in its totality, are the linguistic aspects of philosophizing able to become theoretically relevant and effective.¹⁵⁵⁵

Lazerowitz, who himself contributed much to the critical analysis of metaphysical language on the basis of the basic motifs reported above,¹⁵⁵⁶ opined that the inclination of linguistically oriented philosophers to let the exploration of things or ontology merge into language analysis is an indeed regrettable illusion, but at the same time an understandable, indeed unavoidable occupational disease. For philosophical questions represent mere language questions insofar as philosophers actually concern themselves not with things themselves, but with talk of things, i.e., with words; the objects of philosophical ontology are accordingly of verbal character or at least the shadow of a terminology surrounds them, they form "linguistically engineered illusions"; words do not actually become names of things, but precisely only in name, and therefore philosophical ontology arises and decays as a result of academic terminological games, it is basically a grammar presented in ontological guise.¹⁵⁵⁷ The rejection of the "linguistic turn" in philosophy appears here as consistent continuation of the metaphysics-critical approach that had originally inspired that very turn. With quite different intention, metaphysicians have tried to make use of the difficulties or even dead ends of anti-metaphysical philosophy of language—just as they wanted to turn the epistemologically grounded

¹⁵⁵³ Watkins, *Confirmable...*, 360 ff.

¹⁵⁵⁴ Wisdom, *Philosophy and its Place*, 194.

¹⁵⁵⁵ Wisdom, *Philosophy and Psychoanalysis*, 181.

¹⁵⁵⁶ See esp. *Structure*, 160, 162, 95 ff.; *Studies*, 233 f.; *Philosophy*, 90, 91.

¹⁵⁵⁷ Lazerowitz, *Moore*, 105, 119 ff.; cf. below Section 4 c.

relativization of neo-positivist metaphysics criticism in favor of transcendence metaphysics.¹⁵⁵⁸ Thus they joined the view that ontology cannot be dissolved into language analysis, and in doing so they asserted from their perspective that metaphysics poses the question of the ultimate ground of empirical existence, which cannot be dismissed as illusionary or merely linguistic.¹⁵⁵⁹ Furthermore, it was argued that the accusation of deviation from everyday language applies to natural science, for example, no less than to metaphysics¹⁵⁶⁰ and the reason why this deviation cannot be avoided lies in the legitimate endeavor of metaphysics to grasp experience not superficially but in its entire multidimensionality and depth.¹⁵⁶¹ In a witty plea for metaphysics, Urban worked out the symbolic character of language in general and admitted the symbolic character of metaphysical language unreservedly, in order to derive from it not the necessity of its purification, but rather the conclusion that metaphysics must be legitimate and unavoidable if it emerges from the unalterable nature of language itself. Metaphysical discourse must inhabit every discourse, for without metaphysical transcending of the empirical one cannot talk about it, and therefore language must by the nature of the thing form general terms and concepts; we simply cannot speak intelligibly if we do not speak of the Whole. Metaphysical language is neither poetic nor scientific, although it participates in both; in any case, it is just as symbolic as scientific knowledge—a strong similarity that goes back to the metaphysical, i.e., transcending the Empirical prerequisites of science. Metaphysical symbols are taken from a narrower area of experience and are applied metaphorically to the Supra-empirical; they have, however, also value character and to that extent they can be designated as anthropomorphic.¹⁵⁶²

c. Metaphysics from a Sociological and Psychological Perspective or Metaphysics and Religion

We know that sociological criticism of metaphysics first developed in the Age of Enlightenment, when the massive and systematic struggle against (the ecclesiastical version of) religion reached a degree of intensity previously unknown, indeed unimaginable. The extensive structural identification of metaphysics with religion or mythology therefore had to become the cornerstone of sociological metaphysics critique. The development proceeded no differently in the 19th century, in which criticism of metaphysics also frequently appeared as criticism of religion.¹⁵⁶³ This is already the case with the Young Hegelians, who, in their search for a radical philosophy of action with direct social relevance, praise the fruitfulness of ethics against the

¹⁵⁵⁸ See 4. a (cc) in this chapter.

¹⁵⁵⁹ See e.g. Copleston, *The Function*.

¹⁵⁶⁰ Oeing-Hanhoff, *Sprache*, 458.

¹⁵⁶¹ Findlay, *Language*, 124.

¹⁵⁶² Urban, *Language*, esp. 631, 637, 643, 633, 638 ff., 657, 673.

¹⁵⁶³ See Section 4 (aa) in this chapter.

sterility of metaphysical speculation; ethics, as Hess wrote in this context, "forms the foundation of our new life".¹⁵⁶⁴ Their identification of metaphysics and religion with one another went so far that B. Bauer could opine that in the Middle Ages "the metaphysicians possessed world dominion".¹⁵⁶⁵ However, their answer to the question of whether Hegel was a metaphysician in the old sense, or whether his metaphysics was to be rejected as disguised religion, turned out not to be as uniform. Those among them, above all B. Bauer, who wished to interpret Hegel's ontology in the sense of the factual identity of self-consciousness and absolute spirit, or of man and God, or of history and Being, regarded the master as the representative of an immanentist monism, which turned against theology and religion, albeit covertly but clearly enough. As Marx's dissertation proves, this activist idealism knew itself to be in alliance with atheistic materialism when it came to combating religion and the morally corrupting consequences of its doctrine of immortality, etc.; on the other hand, however, he did not want to throw philosophy and religion together into the pot of illusory "ideology," but reserved for the former the world-improving role of the rational critical authority vis-à-vis an irrational reality.¹⁵⁶⁶ Only the turn of a wing of the Young Hegelians toward materialism, initiated by Feuerbach, and the accompanying discovery of the "bad" metaphysical aspects of Hegel's work made the initially accepted boundary between philosophy and religion more questionable (it was blurred a little later by Marx's doctrine of ideology) and shaped the simultaneous critique of metaphysics and religion without the previous inhibiting differentiations. It was no coincidence that the extensive identification of metaphysics and religion with one another had already found its loudest and most consistent advocates among the materialists in the 18th century.

It is clear that a materialist critique of metaphysics had to direct itself not only against the definition of this transcendence as God, but just as much against metaphysical abstractions as the enemy of the materially concrete in nature and history, as well as against ascetic, transcendently grounded norms as the suppression of the essential corporeality of man. Such tones, which predominate in Marx's Paris Manuscripts, had become common through Feuerbach's critique of Hegel. In Feuerbach, the revolt against metaphysical-intellectualist abstraction forms the necessary reverse side of the revolt of the sensuous man against the religious suppression of his essence. The commonality of metaphysics and religion consists in the preference for the incorporeal or spiritual over the corporeal or material, whereby the former takes the form of theoretical abstractions in metaphysics, and that of ascetic commandments in religion. Feuerbach himself draws the parallel between theoretical abstraction and asceticism. Abstraction from the sensuous, he writes, is the common condition of theology and speculative philosophy, "only with the difference that the abstraction of

¹⁵⁶⁴ *Die europäische Triarchie* (1841), *Schriften*, 116.

¹⁵⁶⁵ *Rußland und das Germanentum*, 47.

¹⁵⁶⁶ On this Neo-Hegelian complex of ideas cf. the analysis in Kondylis, *Marx und die griech. Antike*, 10–26.

theology... was itself a sensuous abstraction, ascetics, whereas the abstraction of speculative philosophy is only a spiritual, thinking one".¹⁵⁶⁷ "Abstraction" and "speculation" hardly differ from one another for him, and accordingly he uses the terms "speculative philosophy," "speculative theology," "metaphysics," and "metaphysical theology" freely and synonymously. If a distinction must be made between speculative philosophy and theology at all, then only in the sense that the former represents the more consistent theology: for by detaching God from all sensuous and human elements and making him into a purely spiritual being accessible only to reason, metaphysics identifies him with the essence of reason.¹⁵⁶⁸ The same process of abstraction lies at the basis of the formation of the philosophical concept of reason as of the theological concept of God. If speculative philosophy can climb even higher peaks of abstraction in this process, the reason for this lies in the nature of theology to have to be a belief in ghosts in order to be able to satisfy easily surmised needs, which metaphysics obviously satisfies less directly and popularly. Hence also the necessary subdivision of theology into a "common" one, which has its ghosts "in the sensuous imagination," and a speculative one, which has its ghosts "in non-sensuous abstraction".¹⁵⁶⁹

According to Feuerbach, abstracting means "placing the essence of nature outside nature, the essence of man outside man, the essence of thinking outside the act of thinking".¹⁵⁷⁰ Since such abstracting takes place both in speculative philosophy and in theology, albeit to varying degrees and in different forms, the mechanisms of origin turn out to be practically identical in both: the sensuous and finite is transformed into the supersensible and infinite, and this is then projected into a beyond, resulting in a doubling and at the same time an inversion of the only real, i.e., the sensuous world. Hegel's Logic, this absolute zenith of philosophical speculation, proceeds no differently than speculative theology; indeed, it is "theology turned into logic"; for just as the divine being of theology represents the abstract quintessence of all finite realities, so too everything that occurs in nature is found again in the heaven of logic as the thought of God; everything appears twice, once *in abstracto*, the other time *in concreto*.¹⁵⁷¹ If we want to wrest its secret from speculative philosophy and theology, we must trace the former back to the latter and the latter in turn back to anthropology, that is, take the reverse path as with abstraction. The Absolute of speculative theology thus reveals itself as the historical heritage of the theological pre-worldly being or Nothingness, and the divine being in turn as the quintessence or the abstract absolutization of human predicates. Just as in speculative philosophy the truth of the infinite is the finite, so too in theology the truth of God is man—but in both cases the finite or

¹⁵⁶⁷ *Grundsätze...*, § 10 = *Werke*, III, 257.

¹⁵⁶⁸ *Loc. cit.*, §§ 5–6, p. 249.

¹⁵⁶⁹ *Vorläufige Thesen...*, *Werke*, III, 227.

¹⁵⁷⁰ *Loc. cit.*

¹⁵⁷¹ *Loc. cit.*, 225.

human appears mystified, i.e., with the claim of not being finite and not human.¹⁵⁷² In both cases, therefore, demystification consists in a retranslation of metaphysical determinations into the language of psychology and anthropology. The ontotheological determinations receive their actual meaning when they are traced back to the psychologically-anthropologically stamped conception of God as an intelligent knowledge, and metaphysics or logic in turn becomes immanent science when it is not separated from the so-called subjective, when it is thus recognized as "esoteric psychology".¹⁵⁷³ Metaphysical abstractions that are taken at face value and not retranslated into the language of the finite are empty, such as the concept of Being in Hegelian logic and traditional metaphysics; as Feuerbach emphasizes, following an old metaphysics-critical topos, Being is not a concept separable from things, it is one with that which is, and therefore thinkable only mediately.¹⁵⁷⁴

Despite the reference to the connection between theoretical abstraction and moral asceticism and also despite valuable insights into the intellectual mechanisms of origin and structural commonalities of religion and metaphysics, Feuerbach left much to be desired regarding the investigation of social and historical backgrounds—and this gap could not, as Marx shortly thereafter had to determine, be filled by sweeping explanations such as: "God has his birthplace only in the misery of man".¹⁵⁷⁵ The emancipatory intent, which manifested itself in such explanations as well as in the call to shake off philosophical abstraction and moral asceticism, nevertheless formed the normative motor behind Marx's sociological analysis, which, as is well known, crystallized early on in the view that for the elimination of metaphysics or religion, the radical alteration of that world is required in which metaphysics or religion must be the opium, i.e., the practically paralyzing illusory consolation of the people. Marx, who already in the preliminary works for his dissertation had alluded twice to the transformation of human predicates into the divine subject,¹⁵⁷⁶ moreover praised Feuerbach because he extended the critique of speculative theology by the critique of speculative philosophy, in that he "recognized speculation as the last prop of theology," and denounced, following Feuerbach's vocabulary, "the metaphysical theological caricature of man in his separation from nature".¹⁵⁷⁷ His turn from the Neo-Hegelian philosophy of self-consciousness and from the high estimation of philosophy in general as an independent critical authority to historical materialism, as well as the elaboration of his specific concept of ideology, grounded Feuerbach's identification of metaphysics and theology in a substantially new way, namely through their common inclusion

¹⁵⁷² *Loc. cit.*, 223, 225, 229, 230.

¹⁵⁷³ *Loc. cit.*, 226; *Grundsätze*, § 6 = *Werke*, III, 251.

¹⁵⁷⁴ *Grundsätze*, § 27 = *Werke*, III, 288.

¹⁵⁷⁵ *Loc. cit.*, § 29, p. 295.

¹⁵⁷⁶ *MEW*, *Ergänzungsband*, 1. Teil, 110, 126.

¹⁵⁷⁷ *Die Heilige Familie*, *MEW*, 2, 184, 146.

in the socially and historically conditioned forms of "false consciousness".¹⁵⁷⁸ Marx's critique of metaphysics, however, also has a direct Hegelian root, which largely determined Marxist (and Marxist-Leninist) linguistic usage. We recall that Hegel had contrasted the abstract, isolating, and static mode of observation of metaphysics with the concrete and dynamic dialectical comprehension of things.¹⁵⁷⁹ This juxtaposition was varied in different ways after Hegel; it reappeared, for example, in Kierkegaard's contrasting of the metaphysical and the existential and also lay at the basis of the rejection of "métaphysique sociale" in favor of the study of the "évolutions réelles de l'histoire," which became common in the historicist 19th century.¹⁵⁸⁰ Feuerbach likewise thought that "the negation of space and time" or of the concrete and mutable by metaphysics had "the most pernicious practical consequences," since it must lead to the deification of the "anti-historical principle of stability".¹⁵⁸¹ Marx adopted this terminology early on, for example in his critique of Hegel's philosophy of right¹⁵⁸² or of Bauer's view of history, in which history becomes "a person apart, a metaphysical subject," "of which the real human individuals are merely the bearers".¹⁵⁸³ The adversary of metaphysics now becomes materialist philosophy in general, as Feuerbach opposed it to Hegelianism, but especially physics in its connection with materialism, as was the case in 18th-century France, when the materialists adopted Cartesian physics to combat Cartesian metaphysics and simultaneously religion with its help; for metaphysics, which in the 17th century had still taken natural scientific and mathematical discoveries into account, had meanwhile become empty and sterile.¹⁵⁸⁴

Engels referred explicitly to Hegel to explain the conceptual contrast between metaphysics and dialectics: Hegel's dialectic sees not fixed things, but processes, and thereby sublates the oppositions of true and false, good and bad, identical and different, which are insurmountable for old metaphysics.¹⁵⁸⁵ When Engels defined dialectics as the science of the general laws of motion and development of nature, human society, and thought,¹⁵⁸⁶ he seemed to reduce the dialectical thought to the dynamic moment, i.e., to development and motion, understanding it, despite all professions of the Hegelian doctrine of the conflict-ridden and contradictory character of dialectical processes, in the broad evolutionist sense of the 19th century. In fact, he sometimes judged the historical course of science exclusively on the basis of this criterion, for example when he wrote that metaphysics corresponded to the mode of knowledge of older

¹⁵⁷⁸ "Moral, Religion, Metaphysik und sonstige Ideologie...", *Deutsche Ideologie*, MEW, 3, 26.

¹⁵⁷⁹ See above note 31 in this chapter.

¹⁵⁸⁰ According to a formulation by M. Hess, cited Silberner, *Hess*, 594, note 2.

¹⁵⁸¹ *Vorläufige Thesen...*, *Werke*, III, 232.

¹⁵⁸² MEW, 1, 235, 268.

¹⁵⁸³ *Heilige Familie*, MEW, 2, 88.

¹⁵⁸⁴ *Loc. cit.*, 132 ff.

¹⁵⁸⁵ *Ludwig Feuerbach...*, IV = MEW, 21, 293 f.

¹⁵⁸⁶ *Anti-Dühring*, I, 13 = MEW, 20, 132.

natural science, which—in contrast to the interest of the modern one in processes, origins, and developments—proceeded statically and by collecting,¹⁵⁸⁷ or when he feared that vulgar materialism, to which Hegel's "enormous historical sense" was quite alien, would return to pre-dialectical materialism or to old metaphysics "with its fixed categories".¹⁵⁸⁸ However, Engels' understanding of dialectics also contains a second, equally important aspect, which has remarkable epistemological implications. Metaphysics views things not only statically, but also in their isolation from one another, i.e., detached from the total context into which they belong functionally and structurally. If dialectics is to represent the antipodes of metaphysics, it must conceive things both in the dynamics of their historical becoming and in their totality, and thus in the full complexity of their relationships to one another. On the basis of this second anti-metaphysical criterion, Engels designates thinkers such as Spinoza or Descartes as dialectical, who designed universal systems under the viewpoint of totality, while he attributes metaphysical traits to English empiricism represented by Bacon and Locke as well as to French Enlightenment philosophy. He laments that modern natural science, which stood under the influence of this narrow-minded empiricism, in researching nature decomposed it into isolated elements and thereby viewed natural objects "in their isolation, outside the great total connection." The great synthetic philosophers of the 17th century preceded science in this respect, which will only take the right path when it succeeds in bringing the thought of totality and the investigation of processes in the dynamics of their development to a common denominator.¹⁵⁸⁹

Comte shares with the Marxists the conviction that metaphysics is not an anthropological constant, but a transitory (intellectual-)historical phenomenon that thrives on specific social soil and decays with it; in this respect, his critique of metaphysics may be reckoned among the sociological type. He is, of course, unfamiliar with both the concept of ideology in the Marxian sense and the base-superstructure doctrine of historical materialism; nevertheless, he constantly reminds us of the social backgrounds of the three great phases in the development of humanity, which are characterized by the predominance of the theological, the metaphysical, and the positive spirit. The great caesura takes place at the transition from the second to the third phase, that is, from the military to the industrial social state, which will entail the end of metaphysics

¹⁵⁸⁷ Ludwig Feuerbach..., MEW, 21, 294.

¹⁵⁸⁸ Rezension von Marx "Zur Kritik...", *Das Volk*, 20. 8. 1859 = MEW, 13, 472 473 f.

¹⁵⁸⁹ *Die Entwicklung des Sozialismus*, II = MEW, 19, 202 ff.; *Anti-Dühring*, Einleitung, MEW, 20, 20 f., 22 f.; cf. *Dialektik der Natur*, Einleitung, MEW, 20, esp. 315. See also Klaus-Buhr, *Philos. Wörterbuch*, 790 f.

Interestingly, the authors blame the survival of metaphysics not only on social causes such as the struggle "of the reactionary circles of the bourgeoisie against social progress", but also on epistemological reasons. An "important epistemological source" of metaphysical thinking consists, in their view, in the peculiarity of human knowledge that it cannot reflect the object immediately as a whole, but absolutizes individual moments of the cognition process on the way to synthesis.

without any hope of resurrection; for the human spirit loves no regressions and lets what is overcome be overcome.¹⁵⁹⁰ With the Marxists (and Hegel), Comte also shares the juxtaposition of the dogmatic-abstract (or metaphysical) and historical mode of observation,¹⁵⁹¹ which for him, however, is neither called dialectical nor supplemented by the thought of totality. According to this, metaphysical for Comte is any thinking that is built on the basis of logical concepts without regard to "positivité scientifique"; from this perspective, not only revolutionaries who fight against theology without serving the scientific spirit of positivism appear as metaphysicians, but also representatives of modern sciences such as A. Smith, who is accused of "conceptions purement métaphysiques".¹⁵⁹² And finally, Comte shares with the sociologically minded critics of metaphysics the assumption of the essential affinity between metaphysics and religion, although he shows himself more reserved in this regard and differentiates more objectively. Since for him, as mentioned, the great caesura takes place at the transition from the military to the industrial stage and since, accordingly, the derogatory bourgeois-liberal equation of war-lusting feudal lords and power-hungry clergy lives on in his imagination, he considers the metaphysical state in the history of the spirit and of humanity as a simple "modification générale" of the theological one, wherein supernatural forces are replaced by abstract entities or personified abstractions which inhabit the beings of this world and are supposed to cause observable phenomena; thus the active intervention of supernatural forces in world events is eliminated and the latter is derived not from an unpredictable divine will, but from general causes or laws established once and for all by God.¹⁵⁹³ The transformation of theology into metaphysics therefore obviously accompanies the replacement of polytheism by monotheism,¹⁵⁹⁴ but despite the gain in simplicity and thus in rationality that the rise of metaphysics signifies, it remains a hybrid form with regard to overall development; compared to theology, it even exhibits a lesser "consistance intellectuelle" and consequently possesses a much weaker social basis.¹⁵⁹⁵ Nevertheless, it forms an indispensable "philosophie transitoire," and precisely the mediating "caractère batard" of its concepts offers a good incentive for its own overcoming in the direction of the positive stage.¹⁵⁹⁶

For a representative of the meanwhile matured positive science like Pareto, positivism could no longer mean an eschatology and the precedence of the positive spirit could no longer mean a final stage in human history; it was merely the name for certain methodological ground rules, which were understood as the direct opposite of theological and metaphysical dealings with

¹⁵⁹⁰ *Cours*, I, 16.

¹⁵⁹¹ See e.g. *loc. cit.*, I, 64.

¹⁵⁹² *Loc. cit.*, V, 89, 610, 619; IV, 188, 212 f.

¹⁵⁹³ *Loc. cit.*, I, 3; IV, 562 f.; V, 86 ff.

¹⁵⁹⁴ *Loc. cit.*, V, 86.

¹⁵⁹⁵ *Loc. cit.*, I, 563.

¹⁵⁹⁶ *Loc. cit.*, I, 10 f.

reality. The great commonality between theology and metaphysics consists, in Pareto's opinion, in their indifference to experience. Metaphysical statements and theological commandments stem equally from a super-empirical ideal core, which is then enriched by pseudo-logical explanations until a whole system comes about; metaphysicians and theologians admittedly always appeal to experience, but in doing so they select certain facts with a view to a certain goal, so that experience is only allowed to confirm preconceived opinions.¹⁵⁹⁷ From a logical-experimental point of view, religious personifications and metaphysical entities differ just as little from one another, if one disregards the fact that the former are more common among the uneducated, the latter more among the educated; moreover, there are mixtures of personifications and abstractions, among which Pareto counts concepts such as Humanity, Reason, Nature, the Good, the True, etc. Although the formal differences between religious personification and metaphysical abstraction exist as such, the belonging together of the two is shown in the commonality of their content or in their common reference to the same transcendence.¹⁵⁹⁸ Both fulfill similar or identical social functions; in them residues manifest themselves which carry powerful social forces, and therefore they serve as a source of practical commandments, whereby metaphysical abstractions such as Morality or Natural Law can take the place of the personal God.¹⁵⁹⁹ Since, despite all rational façades, they appeal to feeling and want to act upon feeling, they must use metaphorical, allegorical, or symbolic language.¹⁶⁰⁰ Finally, constitutive here is the mixture of super-empirical and normative ideas or the normatively motivated and charged explanation of something super-personal, such as the Good, by something equally super-empirical, such as Purpose.¹⁶⁰¹

When Pareto pointed out the function and significance of the normative component within metaphysical thought structures, he was saying nothing new. The most prominent among those who had preceded him remains, of course, Nietzsche, who also in this point adopted Kantian and Neo-Kantian thought and developed it freely. Just as his conventionalism and fictionalism go back originally to Lange,¹⁶⁰² so too his view of the normative motivation, indeed of the normative essence of metaphysics, may be traced *grosso modo* to the Kantian fundamental connection of metaphysics with the (normative) postulates of practical reason. The decisive normative component of metaphysical thinking yields its great common denominator with religion via the connecting line of morality. In fact, Nietzsche often speaks in one breath of "moral-metaphysical" needs and declares that the character of previous philosophy was shaped

¹⁵⁹⁷ *Trattato*, §§ 582, 613.

¹⁵⁹⁸ *Loc. cit.*, §§ 1510–1513, 1539.

¹⁵⁹⁹ *Loc. cit.*, §§ 1066, 835, cf. 616: the social importance of metaphysics explains its greater resistance in the social than in the natural sciences – "e forse resisterà sempre nella pratica sociale".

¹⁶⁰⁰ *Loc. cit.*, §§ 490, 1530, 1613, 1614.

¹⁶⁰¹ *Loc. cit.*, § 478.

¹⁶⁰² See note. 356.

by moral considerations.¹⁶⁰³ Philosophers have philosophized either under the "tradition of religious habits" or under the "hereditary power" of the so-called metaphysical need—and in both cases they arrived at doctrines that were "very similar to religious opinions".¹⁶⁰⁴ Contrary to Schopenhauer's view, religions did not arise from the metaphysical need of man, but the reverse was true: metaphysics developed as a substitute for a religious view of another world—a view which, in its familiar religious form, loses vitality and persuasive power for whatever reasons, but which one cannot completely abandon and therefore must replace with an analogue. However, the assumption of a beyond was not called forth by a drive or a need as such, but by errors in the interpretation of certain natural processes, by an "embarrassment of the intellect".¹⁶⁰⁵ Thus the "division of the world," which is common to religious and metaphysical conceptions, and the associated decomposition of man into soul and body, arose from a certain interpretation of dreams, or from the impression that in dreams a second real world appears, a world of spirits that guide world events; hence it becomes understandable why metaphysics explains the scripture of nature just as "pneumatically" as the church and its scholars did with the Bible. In general, it can be said that only "the very worst methods of knowledge," namely "passion, error and self-deception," have brought metaphysics into the world.¹⁶⁰⁶

In his late work, Nietzsche tacitly drops this derivation of metaphysics from error or ignorance and instead sketches a psychological interpretation of its origin—one, moreover, which could just as well be proposed to explain the genetic process of religion. According to this, metaphysics is rooted in timidity or, conversely, in the wish to make the fear of suffering more bearable. What causes suffering in this world, namely desires, arbitrariness, unpredictable change, is eliminated in another, beautiful and perfect world, which is created for precisely this purpose. Suffering, in other words, urges the thought that this world is apparent, conditional, and contradictory; it automatically births the longing for its opposite, and thereby "the *ressentiment* of the metaphysicians against the real becomes creative".¹⁶⁰⁷ This psychological process takes a moral-normative turn for two reasons. First, the cause for suffering must be named; if moral error or moral guilt is regarded as such, then the metaphysical doctrine of the two worlds, of the fall from the more beautiful and better world and of the conditions for its recovery, connects *eo ipso* with an ethics or doctrine of duties.¹⁶⁰⁸ Second, with the metaphysical assumption of an ontologically firm transcendence removed from becoming, in which suffering ceases and harmony reigns, higher reality and at the same time a higher value must be

¹⁶⁰³ *Wille zur Macht*, §§ 571, 412.

¹⁶⁰⁴ *Menschliches, Allzumenschliches*, I, § 110 = *Werke*, I, 520.

¹⁶⁰⁵ *Fröhliche Wissenschaft*, III, § 151 = *Werke*, II, 138 f.

¹⁶⁰⁶ *Menschliches, Allzumenschliches*, I, §§ 5, 8, 9 = *Werke*, I, 450, 451, 452.

¹⁶⁰⁷ *Wille zur Macht*, §§ 576, 584, 579.

¹⁶⁰⁸ *Loc. cit.*, § 579.

attributed to it. Metaphysics must even attribute "reality according to the degree of value" to things; the more valuable things appear, the more real they are supposed to be, until finally the Most Valuable becomes the Most Real, God: this is "the concept of value itself, thought as cause"¹⁶⁰⁹. From this normative character of metaphysics it follows that it must be dualistic, for in it Being is opposed to becoming and the Real to appearance in the same sense as Value to disvalue and Good to evil. The belief in the insurmountable opposition of values to one another is the fundamental belief of metaphysicians, who must never hit upon the thought that such oppositions could be a question of perspective—just as they have never asked themselves whether seemingly opposite things might be essentially the same.¹⁶¹⁰ Nietzsche now opposes the metaphysical value-conditioned dualism with his historical-genetic observation, which is intended to show on all levels, on the epistemological as well as the moral-philosophical, how the "Higher" arises from the "Lower," the "Good" from the "Evil," the "Rational" from the "Irrational"; the demonstration of the fruitfulness of fictions and of the psychological prerequisites of the search for truth also belongs to the tasks of this historical-genetic observation.¹⁶¹¹

Nietzsche's psychological analysis of metaphysics rested on the assumption that the real motivation of metaphysicians by no means coincides with their own conception of their own driving forces and goals, that is, with their own self-understanding. Marxist ideology theory started from a similar assumption, presupposing an asymmetry between subjective intention and objective function, and the situation is no different with psychoanalysis, which, by introducing the concept of the unconscious, made the named asymmetry the cornerstone of its interpretations. It is therefore no coincidence, as Freud noted, that philosophy must represent a completely different view of the psychic than psychoanalysis—one, namely, that does not wish to take notice of the unconscious.¹⁶¹² On the basis of its non-philosophical interpretation of the psychic, psychoanalysis now wants to illuminate the origins and structure of philosophy as well as of the other great cultural institutions, i.e., religion, morality, and law; it wants, in other words, to trace "the primitive psychological situations from which the incentives for such creations could arise." Through the development of culture or of the view and mastery of the world from the animistic to the religious and then to the scientific phase, fundamentally the same effects of psychic mechanisms make themselves felt in myth, religion, and morality, whose main function for individuals as well as for communities consists in relieving tensions generated by needs, or in creating compensation for the lack of wish fulfillment. But neuroses

¹⁶⁰⁹ *Loc. cit.*, § 572, cf. 583 A.

¹⁶¹⁰ *Jenseits von Gut und Böse*, I, § 2 = *Werke*, II, 568.

¹⁶¹¹ See programmatically on this *Menschliches, Allzumenschliches*, I, § 1 = *Werke*, I, 447; cf. the good analysis by Granier, *Problème*, 35 ff.

¹⁶¹² *Die Widerstände gegen die Psychoanalyse*, GW, XIV, 103.

are also attempts "to solve the problems of wish compensation individually, which are solved socially by institutions".¹⁶¹³ As "asocial formations" that want to achieve with private means what society has accomplished collectively, neuroses are images and at the same time distortions of the great spiritual creations: just as hysteria is the caricature of an artistic creation and obsessional neurosis the caricature of a religion, so paranoiac delusion is the caricature of a philosophical system.¹⁶¹⁴ The paranoid operates primarily in the construction of a supersensible reality together with the associated myths of Paradise and the Fall, of God and immortality. The task of psychoanalytic research here is "to translate metaphysics into metapsychology," by tracing how psychological factors project themselves into the external world.¹⁶¹⁵ More concretely, psychoanalysis makes philosophy its object by researching the personality of philosophers and showing the subjective motivation of doctrines that have "ostensibly sprung from impartial logical work"; this personality analysis, which, as Freud emphasizes, does not necessarily touch upon the scientific correctness of the work in question, appears all the more necessary as in no other theoretical field does the person of the creator play such a large role as precisely in philosophy.¹⁶¹⁶

According to Freud, philosophy does not necessarily stand in such a strong opposition to science as religion does. In part, it works with scientific methods; however, its paths must separate from those of science when it indulges in the illusion of being able to deliver a gapless picture of the world—and indeed by means of mere logical operations or intuitive modes of knowledge.¹⁶¹⁷ This "fabrication of worldviews" might be left to philosophers "who admittedly find the journey of life infeasible without such a Baedeker that gives information about everything";¹⁶¹⁸ only the patient work of science is, however, really capable of gradually answering the questions and "slowly creating change". This conviction or at least hope that science or scientific philosophy could assume the same therapeutic function vis-à-vis religious and metaphysical illusions as psychoanalysis vis-à-vis neuroses, connects psychological and sociological metaphysics critique in the sense that on both sides metaphysics is not regarded as an ineradicable anthropological constant, but as a basically surmountable symptom of certain surmountable circumstances—regardless of how these circumstances, their etiology, and the corresponding methods of cure or change are determined in each case. Lazerowitz, who sought to expand and partly relativize linguistic metaphysics critique by including the psychological dimension, likewise believes in a development of self-consciousness, or that self-knowledge

¹⁶¹³ *Das Interesse an der Psychoanalyse*, GW, VIII, 415 f.

¹⁶¹⁴ *Totem und Tabu*, II, 4 = GW, IX, 91. *Zur Psychologie des Alltagslebens*, XII = GW, IV, 287 f.

¹⁶¹⁵ *Zur Psychologie des Alltagslebens*, XII = GW, IV, 287 f.

¹⁶¹⁶ *Das Interesse an der Psychoanalyse*, GW, VIII, 406 f.

¹⁶¹⁷ *Neue Folge der Vorlesungen...* XXXV = GW, XV, 173.

¹⁶¹⁸ *Hemmung, Symptom und Angst*, II = GW, XIV, 123.

makes one freer, and speaks of the progress of civilization which, through figures like Copernicus, Darwin, and Freud, has destroyed the great illusions of humanity for its own good.¹⁶¹⁹ He belongs, moreover, to those who fundamentally agreed with Neopositivist metaphysics critique, but on the basis of philosophical reservations against Neopositivism itself felt compelled to reformulate its metaphysics critique as well or to place it in a broader framework. Earlier metaphysics critique—including the Neopositivist one—has, according to Lazerowitz, proven incapable of explaining why something like metaphysics existed at all; the observation (also made by the Neopositivists) that metaphysical questions could not be solved by any new facts or scientific methods, cannot imply that they do not become understandable in another perspective.¹⁶²⁰ There are various theories about the character of metaphysics (one considers metaphysics an empirical, another an *a priori* doctrine, a third derives it from the violation of common linguistic usage, and a fourth calls it nonsense on the basis of a tautological criterion of truth)—but none of them explains why empirical evidence can neither confirm nor refute metaphysics, why the metaphysical distinction between appearance and reality arises and how it functions, why attitudes toward metaphysics constantly change, why metaphysical disputes are not settled by insight into correct linguistic usage, and why, finally, so much nonsense was produced for centuries.¹⁶²¹

Lazerowitz bases his reflections on the empirical-historical observation of the diversity and transience of philosophical theories,¹⁶²² and he speaks as if he meant all of philosophy and not just metaphysics; metaphysics would in this case only be the most conspicuous symptom of a disease of much wider prevalence. As we know,¹⁶²³ he takes the linguistic aspect of philosophizing seriously; he calls language the "plastic medium" of the philosopher and regards metaphysics as "a subtle and remarkable work of verbal art".¹⁶²⁴ At the same time, he warns against overestimating the linguistic factor and against the view that words in themselves contain or express a conception of the nature of things; rather, they represent the means that enables projecting an inner state into the things of the external world.¹⁶²⁵ Philosophical problems have just as little to do with the facts of the world as with the facts of language in which they are formulated. It is true that the philosopher changes linguistic usage, but he does not do this as a language reformer, but because by extending linguistic usage he wants to create the illusion that

¹⁶¹⁹ *Philosophy*, 100 f. An analogous role is attributed to Moore and Wittgenstein in the field of philosophy (104 ff.).

¹⁶²⁰ *Structure*, 24, 25, 64.

¹⁶²¹ *Loc. cit.*, 31 ff.

¹⁶²² See e.g. *Philosophy*, 82.

¹⁶²³ See above Sect. 4b in this chapter, Notes 536, 537.

¹⁶²⁴ *Studies*, 251; cf. *Structure*, 68.

¹⁶²⁵ *Studies*, 235.

he is presenting a theory about the world.¹⁶²⁶ The semantic analysis, which deals with linguistic means and explains how illusions can be generated by them, must therefore be supplemented by psychoanalysis, which brings to consciousness the non-verbal factors that are unconsciously expressed through language; it alone can explain the duration and persistence of illusions.¹⁶²⁷ In its light it appears, namely, that philosophical theories are subtle and highly intellectualized ways of expressing and satisfying needs of the darker regions of the psyche; they are products of the unconscious, which as such have meaning and motivation—or they can also be called verbal dreams, whose linguistic basis must be exposed in order to grasp their mechanisms; in any case, it is essentially about the endeavor to overcome various insecurities and the fear of death.¹⁶²⁸ The illusion of a theory about the world, the non-verbal attitudes that appear on the linguistic level through the change of linguistic usage, and finally convictions that fulfill wishes or assuage fears form the three interacting layers of metaphysical theories.¹⁶²⁹ According to Lazerowitz, this tripartition corresponds to the psychoanalytic tripartition of the soul into the preconscious (here the change of linguistic usage takes place), the conscious (here the illusion thrives that the theory deals with the world), and the unconscious (here wishes and fears are rooted).¹⁶³⁰ The fact that what the metaphysician does is concealed on the linguistic level by the seemingly descriptive use of language and on the psychological level by emotional needs—the fact, therefore, that illusions predominate in such theories—does not mean they were senseless. They contain reality, but this is not that of the world, but that of the (unconscious) contents of our mind; seen in this way, not even statements about the supersensible world can be dismissed as senseless in the positivist manner.¹⁶³¹

In the intellectual-historical pre-field and environment of Neopositivism, the conviction was frequently expressed that metaphysics would one day wither away despite all tenacity and despite its long intertwining with certain human needs. Avenarius, for example, noted that both in the "religions of the great masses" and in the "philosophical worldviews of outstanding individuals," "favorite opinions" and "most sacred convictions" would not be abandoned even if their logical untenability were proven; from this, however, one should by no means draw the conclusion "that what maintains itself for individuals and even generations despite logical defects must also be biologically indispensable for all time".¹⁶³² Concerning the affinity between religion and metaphysics as well as the constitutive significance of normative points of view or hopes and wishes for the formation of metaphysical systems, the pragmatists and Russell had

¹⁶²⁶ *Philosophy*, 108 f., 112 f.

¹⁶²⁷ *Studies*, 256.

¹⁶²⁸ *Loc. cit.*, 237; *Structure*, 26, 69 ff., 77.

¹⁶²⁹ *Structure*, 78.

¹⁶³⁰ *Studies*, 217.

¹⁶³¹ *Structure*, 66.

¹⁶³² *Weltbegriff*, 94 f.

already said a great deal.¹⁶³³ Moore, for his part, saw the essential characteristic of metaphysics in the assumption of a supersensible reality, which not merely *is*, as e.g. numbers are, but actually *exists*, but at the same time does not represent an object of perception and cannot be inferred from such; metaphysics and religion thus share the same basic conviction, only the former wants to prove by reason what the latter accepts in faith. Moreover, metaphysics commits what Moore called the "naturalistic fallacy," i.e., it confuses the supersensible, the Real, and the Good with one another and derives one from the other.¹⁶³⁴ These and similar motifs now flowed alongside the linguistic-analytical approach into Neopositivist metaphysics critique, without, however, being enriched to any appreciable extent. Neurath, who lamented the still missing deepening of the psychological and sociological aspect of Neopositivist metaphysics critique,¹⁶³⁵ could himself offer only vulgar-Marxist aphorisms in this regard (such as that most governments favor metaphysically oriented scholars);¹⁶³⁶ moreover, he attempted to classify the current struggle against metaphysics into the great historical framework of the age-old confrontation of science with magic-religious explanation of the world and to depict the process of dissolution of theology and idealistic philosophy, in order thereby to announce the imminent end of the aberrations of the human spirit.¹⁶³⁷ Carnap likewise emphasized the affinity of myth, religion, and metaphysics with regard to their intellectual content and regarded metaphysics as a further development of myth or as a substitute for theology at the stage of systematic conceptual thinking.¹⁶³⁸ Citing Dilthey, he saw in the content of metaphysics the expression of a feeling of life, only to add in a relativizing manner that a feeling of life can actually only be expressed through art, not through metaphysics.¹⁶³⁹ This seems to imply that metaphysics can disappear if the expression of the respective feeling of life is taken over exclusively by art. On the other hand, however, Carnap does not say what could replace value or norm philosophy, which according to his view is affected by the criterion of meaninglessness no less than metaphysics and is obviously genetically and structurally intertwined with it. If norms and values are vital, then metaphysics or meaninglessness must also be vital. Carnap, however, does not see the question and the dilemma at all.

¹⁶³³ See above Sect. 4a (cc); cf. Mead, *Philosophy*, 622 f.

¹⁶³⁴ *Principia*, 110 ff.

¹⁶³⁵ See above Note 390.

¹⁶³⁶ *Schriften*, I, 457. Cf. Hahn's division of philosophy into world-affirming and world-denying; the latter designs a world beyond as comfort for what people must do without in the here and now (*Superfluous Entities*, 1 f.); see also Schlick, *Probleme*, 40 f.

¹⁶³⁷ *Schriften*, I, 378 ff., cf. 426 ff. (: "Von der Magie zur Einheitswissenschaft").

¹⁶³⁸ *Überwindung*, 226, 240. In formal terms, he traced the origin of myth (including theology) and metaphysics back to the confusion of accompanying object representations with state-of-affairs representations (*Scheinprobleme*, 72; on the meaning of the said confusion see 56 ff., 65 f.).

¹⁶³⁹ *Überwindung*, 238, 239; cf. Neurath, *Schriften*, I, 306.

The assumption of a close connection between metaphysics and feeling of life inevitably had to direct the attention of the metaphysics critics concerned to psychological factors, so that Reichenbach opined that the psychology of philosophers would have to be studied more thoroughly than happens in the usual history-of-philosophy accounts.¹⁶⁴⁰ He attributed the errors of speculative philosophy mainly to three "extra-logical motives." The search for generality—which cannot be suppressed, since our knowledge is based on generalization—drives one to want to answer questions even when the necessary empirical basis for doing so is lacking; then analogical pseudo-explanations are offered, in which wishes are reflected in a pictorial language and the understanding of the philosopher unites with the fantasy of the poet. The search for absolute certainty leads for its part to detachment from the empirical, so that reason can betake itself to a realm where it allows itself to be hindered by no observations; mysticism is only a step away from this. Finally, the search for ethical guiding principles can subjugate knowledge to non-cognitive goals; then the objective justification of ethical judgments is undertaken on the basis of a "cognitive-ethical parallelism," whereby ethical insight counts as a form of knowledge.¹⁶⁴¹ It does not need to be explained specifically why a psychologically and sociologically attuned critique of metaphysics should have devoted itself particularly to the intertwining of metaphysical thought with questions of norms and values—which are not least questions of domination and power. If the Neopositivists, despite introductory hints, left a great deal to be desired in this regard, the reason for this lay not only in the logical-mathematical or epistemological orientation of their interests, but also in their reluctance to openly accept the odium of value-nihilism logically contained in their overall philosophical position and thereby to additionally frighten their primarily bourgeois-professorial audience. Nor were they willing, for the most part, to make common cause with Marxist tendencies in the long run. Therefore, they had to accept the reproach from various sides that their critique of metaphysics had neglected the pragmatic aspect of the metaphysical phenomenon, i.e., its function in society as a means of supporting certain conditions and ways of life.¹⁶⁴² The narrow Neopositivist view of philosophy as (philosophy of) science left both extra-scientific areas of life and the relationships of the latter to science unconsidered. Within the framework of a broad philosophy that would concern itself with the comparative analysis and critique of the general forms of discourse in culture, it could turn out that metaphysics constitutes a part or aspect of these forms.¹⁶⁴³ It could turn out, in particular, that metaphysical discourse, while having neither final and unchallengeable instructions for the conduct of life nor an alternative to scientific world-interpretation to offer, is nevertheless

¹⁶⁴⁰ *Aufstieg*, 47.

¹⁶⁴¹ *Loc. cit.*, 18, 24, 36, 38 ff., 64, 76.

¹⁶⁴² Cohen, *Dial. Materialism*, 153 f.; cf. Frank, *Pragmatic Components*, 163 f.

¹⁶⁴³ Morris, *Pragmatism*, 97 f.

capable of organizing the behavior of certain subjects in a calculable way; as such, it has meaning and possesses a legitimate place within culture.¹⁶⁴⁴

Horkheimer undertook a double attack against metaphysics and positivism, whereby the two-sidedness of his enterprise brought to light an ambiguity in his own position. Due to the split in bourgeois consciousness, metaphysics in late bourgeois society forms the reverse side of positive science or positivism, and as an "offshoot of religion" it fulfills analogous functions, i.e., it consoles for the hardness of fate in this society and offers the annihilated individual the way out of illusions and dreams.¹⁶⁴⁵ The essential affinity between metaphysics and religion appears now not only in their common effect, but also in the commonality of their formal structure, through which this effect is achieved. The Being of metaphysics is "primarily value-laden," and consequences for action are derived from its character; the same applies to the "immediately theological systems" (metaphysics is thus mediate theology), in which the assumed dependence of praxeology on ontology is expressed in unconcealed command form.¹⁶⁴⁶ In materialism, Horkheimer now thinks, no such intertwining of value-laden Being and Being-conforming Ought takes place, for matter is in itself meaningless and cannot in itself ground a norm.¹⁶⁴⁷ If one wants to take this correct observation seriously, then one must consistently end up at nihilism, which accepts neither values nor disvalues, as it was represented in the Age of Enlightenment by La Mettrie and Sade.¹⁶⁴⁸ Horkheimer, however, has no desire at all for such anti-metaphysical solutions; on the contrary, he combines the materialist option with an emancipatory, ergo normative demand and attitude, and he even declares that "practical requirements react upon the content and form of materialist theory".¹⁶⁴⁹ The normative essence of the named ontological option thus appears already in the fact that one believes that by this option one *ipso facto* demonstrates one's own opposition to those norms which tend to be derived from an idealist ontology. If Horkheimer claims that no concrete mode of behavior can be based on materialism, then one can hold up to him his own observation that idealism was sometimes reactionary, sometimes progressive.¹⁶⁵⁰ And if he speaks out for "dialectical" materialism, then one can ask him how the coupling of an originally—and essentially—idealist dialectic with materialism is to be defended epistemologically. The emphasis on the historical aspect of dialectical observation proves nothing for its (potential) materialist character—historicism can just as well be a component of a fundamentally idealist and intellectual-historically oriented dialectic, especially if, like Horkheimer himself, one is

¹⁶⁴⁴ Morris, *Signs*, 177 f.

¹⁶⁴⁵ *Der neueste Angriff*, 86 f., 90.

¹⁶⁴⁶ *Materialismus*, 38 f.

¹⁶⁴⁷ *Loc. cit.*, 40.

¹⁶⁴⁸ Kondylis, *Aufklärung*, 490 ff., 503 ff.

¹⁶⁴⁹ *Materialismus*, 45, cf. 43, 46 f.

¹⁶⁵⁰ *Loc. cit.*, 42.

interested in emphasizing the active-subjective factor against positivism and counts Hegel, of all people, but not the positivists, among the "real Enlightenment".¹⁶⁵¹

Horkheimer's ambiguity—i.e., his rejection of metaphysics while simultaneously holding on to normative positions and associated thought structures of metaphysical origin—is shown not only in his defense of materialism, but also in his fierce critique of positivism. Positivism is for him, as mentioned, the reverse side of neo-romantic metaphysics; it represents the necessary complementary aspect of late bourgeois turning away from social reality, i.e., the narrow instrumental and purposive-rational spirit, which disdainfully ignores the essence of man and, already in epistemology, in contrast to older empiricism, completely disregards the subject. Positivism does not want to admit that no grasping of experience is possible independent of the activity of a subject, that is, independent of a theoretical attitude; it moreover becomes an apology for the existing order by ignoring the dynamic tendencies toward changing things and the corresponding theoretical perspectives through the misjudgment or elimination of the historical aspect.¹⁶⁵² Horkheimer opposes all this with the dialectical or critical view, which orients itself toward historical becoming and the fact of change, but at the same time wants to place becoming and change in connection with the "subjective interest" or the "correct" or "reasonable" will. Historical and subjective-volitional magnitudes seen in this unity are to be utilized theoretically on the basis of a thinking that operates with categories such as "essence and appearance," "identity in change," or "concept of man".¹⁶⁵³ In order to fulfill the critical-normative concern of his own theoretical design, Horkheimer must therefore use a conceptual instrumentarium that was created in the form of metaphysical concepts by metaphysical thinkers; the in-itself value-free observation that experience can only be grasped in a certain theoretical perspective or against the background of a certain basic attitude transforms under his hand into the essentially normative demand for grasping historical and social becoming from the perspective of critical-emancipatory interests of struggling subjects. The recourse to metaphysical conceptuality is therefore unavoidable if normative positions, regardless of their content, can be formally-structurally grounded only with the means that metaphysical thinking makes available; for such thinking was formed not least in the endeavor to underpin norms with ultimate arguments. The indispensability of metaphysical thought structures for the "critical" enterprise was, incidentally, openly admitted a few decades later by Adorno, who, precisely in order to enable himself theoretically to take account of the normative "need of thinking," had to declare himself "solidary" with metaphysics "at the moment of its fall" (i.e., after the collapse of deductive metaphysics of transcendence).¹⁶⁵⁴

¹⁶⁵¹ *Loc. cit.*, 56, 59.

¹⁶⁵² *Der neueste Angriff*, 90, 92, 105 ff., 120, 134.

¹⁶⁵³ *Loc. cit.*, 111 ff., 95.

¹⁶⁵⁴ *Negative Dialektik*, 397 f.

Sociological metaphysics critique in the Age of Enlightenment proceeded from the assumption of a close bond between religious-metaphysical thought structures and the interests of the rulers. This assumption was then adopted by Marxism and refined with the means of the Marxist doctrine of ideology and largely freed from its Enlightenment-moralizing naiveties (metaphysics or religion had arisen through a subjective evil will and was kept alive by refined artifices of priests and despots). Sociological metaphysics critique reached an even greater depth and maturity in the 20th century, when, based on advances in the investigation of worldviews (partly through further development of the Diltheyan approach, partly through further development of Marxian ideology theory by modern sociology of knowledge), one began systematically to integrate the previously decisive class-based standpoint into a synthetic framework and thus to view the metaphysical phenomenon multidimensionally; the concept of the social expands now and includes not only aspects of domination but also (more or less connected with them) factors that sometimes even reach into the anthropological. The rooting of the metaphysical phenomenon in the broadly conceived social implies first of all that metaphysics may not be regarded, as its own claim reads, as a creation of pure logical thinking. As Leisegang wrote, metaphysics is indeed built up by logical thinking, but it does not arise from it; logical thinking is preceded by the grasping of a realm of reality which is considered solely significant metaphysically and then fades to the extent that logical thinking detaches itself from it in order to ground itself in itself.¹⁶⁵⁵ Sociological research into metaphysics starts precisely at this un- or pre-logical choice of the realm of reality deemed central and the motivation driving it. James had already noted that every philosophy represents an outline of the world on the basis of particular experiences with a certain part or aspect of reality, which are then generalized *per analogiam*; thus theists think from the model of making, pantheists from the model of growth, etc.¹⁶⁵⁶ Gomperz worked out four such explanatory models using the example of Presocratic cosmogonies and cosmologies: a biological one, revolving around the thought of growth and decay; a political one, in which nature is governed according to the model of certain social conditions; an artistic one, which interprets events as a process of artistic creation; and a mechanical one, based on the idea of technical production.¹⁶⁵⁷

In a large-scale synthetic attempt, Topitsch has linked up with such and similar approaches to describe the origin and end of metaphysics. His presentation can be designated as sociological (and historical) in the sense just mentioned, since he seeks the foundation of all *weltanschauung* constructions in the elementary relationships of the evaluating and acting human being to his environment, thus accepting the primacy of the category of socially anchored action.¹⁶⁵⁸ For

¹⁶⁵⁵ *Denkformen*, 442.

¹⁶⁵⁶ *Pluralistic Universe*, Works, IV, 9 f.

¹⁶⁵⁷ *Studies*, 76 f.

¹⁶⁵⁸ *Vom Ursprung*, 374, 16.

Topitsch, too, a basic characteristic of sociological metaphysics critique remains that no essential difference is made between myth, religion, and metaphysics or philosophy. All three are regarded as endeavors to answer the pressing existential questions of socially living people and thereby to bring about relief or to sanction certain conditions and behaviors; seen in this way, no fixed boundary can be drawn between myth and philosophy, especially considering that the structures of mythical-metaphysical thinking live on in modern natural law or in the philosophy of history.¹⁶⁵⁹ Modifying Gomperz's typology, Topitsch now divides the model conceptions for understanding the world into biomorphic and intentional, the latter in turn into sociomorphic and technomorphic; intertwining of these basic models with one another is, of course, not a rarity.¹⁶⁶⁰ The practical-social rootedness, conditionality, and usability of intentional worldviews is shown by the fact that the value moment stands at their center. Philosophical-metaphysical questioning feeds not least on the difficulties encountered in the practical application of norms, as well as on attempts to explain these difficulties. To make such explanations plausible, the sphere of the super-empirical or transcendent must be summoned—at the price that the commandments derived therefrom must represent empty formulas that can be combined with quite different concrete contents, and also that an insurmountable contradiction arises between the general ontological statements and the specific practical commandments.¹⁶⁶¹ In any case, a basic feature of intentional worldviews consists in the doubling of concepts of Being on the basis of presupposed value viewpoints. In this way, "true" reality is distinguished from mere empirical or apparent reality, values are derived from the former, and the fact that they may not prevail in the empirical world can no longer count as a definitive argument against their reality.¹⁶⁶²

Corresponding to the observation of the indispensable intertwining of Is and Ought in metaphysical thinking, Topitsch opines that the consistent theoretical distinction between Is and Ought or facts and value judgments since Hume and Kant has initiated a decisive turn in the history of metaphysics or actually its end.¹⁶⁶³ This end, which is expected in all sociologically inspired critiques of metaphysics, is of course not supposed to be brought about simply by the named theoretical distinction, according to Topitsch, but by certain social and historical factors. Industrial revolution, rule of science and technology, as well as democratization of society withdraw the nutrient soil from the mentioned metaphysical models; the spread of technical thinking eliminates biomorphic conceptions and also makes the artistic-craftsmanship shaping of the objective world no longer appear exemplary, while the projection of earthly power

¹⁶⁵⁹ *Loc. cit.*, 13 ff., 124, 282 ff.

¹⁶⁶⁰ *Loc. cit.*, 10, 38 ff.

¹⁶⁶¹ *Loc. cit.*, esp. 357 ff., 376 ff.

¹⁶⁶² *Loc. cit.*, 322 f.

¹⁶⁶³ *Loc. cit.*, 340.

relations into the cosmos becomes obsolete through the dissolution of social hierarchies and fundamental social equality.¹⁶⁶⁴ No ethical anarchy and crisis is to be feared from the elimination of metaphysical value grounding; people will adapt to the new situation, and worldview problems will resolve themselves, "not by finding an answer, but by becoming objectless".¹⁶⁶⁵ Topitsch wrote this in a decade when many prophesied the "end of ideologies," and apparently with the intention of contributing something to it himself. A little later, however, he had to turn his ideology-critical weapons, sharpened in the fight against traditional metaphysics, against those who indeed wanted nothing to do with traditional metaphysics any more than he did, yet simultaneously appeared with radical slogans in the name of certain values. He would not have become entangled in this paradox if he had not overlooked the fact that metaphysical thought structures must survive the collapse of time-honored metaphysical world models because they serve (also) to ground values in general and as such.

d. The Metaphysical Need of Man

Taken at face value, the view that there is an ineradicable metaphysical need in man, which must again and again be reflected in metaphysical thought structures or worldviews, cannot be designated as metaphysics critique; indeed, it appears with the claim to defend metaphysics against any criticism and also against any prediction of its end with ultimate arguments rooted in the human essence itself. Nevertheless, it contains a paradox: namely, it refers to man in order to legitimize statements that go far beyond man and are supposed to grasp Being as a whole; yet it cannot be explained why this man, who is supposed to feel the same need for metaphysics always and everywhere, has been able to produce so many divergent, indeed even conflicting forms of metaphysics. This question can, of course, be answered to the effect that the named need remains plastic enough in its permanence to express itself through the most varied contents—in this case, however, it must be assumed that metaphysics can have no binding content that could count as secured knowledge of Being. Whether it intends to or not: the view of the metaphysical need of man must, in its effort to save metaphysics at all, relativize this same metaphysics materially. By its forced indifference to the respective contents of metaphysics, however, it withdraws from individual metaphysical theories the theoretical legitimation they claim for themselves and by which alone they can live, namely that they contain objective truths about Being that are independent of mere psychological factors and changing perspectives. In this respect, the named view belongs together with actual metaphysics critique—and it is no coincidence that it formed precisely when traditional metaphysics had already collapsed; it arose, as it were, as the last line of defense of metaphysics, which could not hold always or entirely for the very reason that it had to admit *a limine* the

¹⁶⁶⁴ *Loc. cit.*, 337, 339.

¹⁶⁶⁵ *Loc. cit.*, 395, 397.

validity of a basic argument of metaphysics critique (i.e., the argument of the arbitrariness of metaphysical contents). Its ambiguity was already shown by the fact that in the Age of Enlightenment it came to honor precisely through a critic of metaphysics like Kant.

Also Schopenhauer, who familiarized the philosophical public with the expression "metaphysical need," was no friend of traditional dualistic metaphysics. It sounds Aristotelian when Schopenhauer sees the source of (metaphysical) philosophizing in wonder; this wonder, however, does not for him simply form the preliminary stage to the calm of the theory surveying everything, as the ancient primacy of the *vita speculativa* and the associated preeminence of the *logistikon* within the hierarchy of the faculties of the human psyche wanted, but it roots for its part in the dark layers of unrest and fear, specifically the fear of death. The inner essence of nature, i.e., the Will to Life in its objectification, therefore only comes to reflection in man and asks itself what it is, because here for the first time it confronts death with consciousness; knowledge of death and the consideration of suffering provide the strongest impetus for philosophical reflection, which would be superfluous and unknown in endless and painless life; not merely the existence of the world, but even more the mournful in it makes man an *animal metaphysicum*.¹⁶⁶⁶ Schopenhauer indeed believes in a theoretically fruitful use of the metaphysical need or in the ability of the metaphysician to achieve lasting results through unbiased and logically as well as empirically grounded reflection; the memory of the previous historical reality of metaphysics, however, makes one skeptical. For it must be established that metaphysical ability does not go hand in hand with the metaphysical need, and moreover, that people like priests and professional philosophers have exploited this same need for very selfish purposes. Metaphysical systems vary according to the intellectual powers of peoples and individuals; one can, however, divide them fundamentally into two classes, i.e., into philosophical ones, which have their authentication within themselves, and religious ones, which have their authentication outside themselves. It is by no means certain here that philosophical metaphysics, because of its grounding through (appeal to) reason, *eo ipso* contains fewer absurdities than religious metaphysics; both basic forms of metaphysics can in any case trigger enmity and war due to their unreasonableness.¹⁶⁶⁷

We mentioned that Nietzsche did not share Schopenhauer's view on the origin of religion from the metaphysical need of man, but on the contrary wanted to see in metaphysics a byproduct of religion.¹⁶⁶⁸ By this he meant traditional dualistic value-metaphysics, which in fact temporally follows the formation of religious thought structures. A metaphysics thus arisen cannot appeal to an eternal metaphysical need (at most the need would then be a religious one); the question

¹⁶⁶⁶ *Die Welt als Wille*, II, I, 17 = SW, III, 175 ff., 190.

¹⁶⁶⁷ *Loc. cit.*, 178 ff.

¹⁶⁶⁸ See above Sect. 4 in this chapter.

must, however—also for Nietzsche—be posed differently when it is a matter of tracing metaphysics back to certain factors rooted anthropologically or inseparable from the socially living human being, independent of its religious coloring. I would like to show here briefly that Nietzsche explains the origin of metaphysics in such a way that he must assume its inevitability (be it religious or profane); not only is he unable to support theoretically sufficiently his demand for the elimination of traditional metaphysics, but also to the extent that he gives up the negative function of the metaphysics critic in favor of the positive role of the prophet of a healthy future or of the overcoming of nihilism, he develops views which are metaphysical in their essence and—like the earlier metaphysical views fought by him—go hand in hand with certain normative positions or sympathies. Nietzsche's metaphysics is certainly not to be sought in his doctrine of the Will to Power. For he does not substantiate this will, he makes of it no *Ens* and no single unified principle, the manifestations of which would be the individual wills to power. Will to Power in the singular means for him no last indivisible quantum and no simple constant unity, but a counter- and interplay of several wills, which are organized in themselves into unities and at the same time inserted into the counter- and interplay of a more comprehensive will to power. And just as *the* Will to Power does not exist, so *the* world does not exist either, so that for this reason alone the world cannot be grounded in the Will to Power as its ground of being.¹⁶⁶⁹

In order to understand why Nietzsche's genetic explanation of metaphysics must entail the assumption of its unsurpassability, indeed its anthropological rootedness, we should recall once more¹⁶⁷⁰ the (Neo)Kantian origins of his fictionalism and conventionalism. At his early and short, but important intellectual station with Lange, he initially held on to the distinction between thing-in-itself and appearance; soon, however, he understood the unknowability of the former in the sense of its cognitive irrelevance, which was felt as the irrelevance of the mentioned distinction in general.¹⁶⁷¹ Above all, Lange's psychologistic interpretation of Kantian epistemology¹⁶⁷² drew Nietzsche's attention to the mechanisms of fiction formation, whose central importance for knowledge was already implied by Kant's elementary gnoseological assumptions. For if the thing-in-itself is unknowable, while we at the same time obviously possess logic and science that function sufficiently in practice, it must be concluded from this that logic and science are not dependent on ultimate knowledge in the metaphysical sense—indeed that on the basis of the finding of their independence from ultimate and fixed truths, they must be designated as fictions, whose untruth, however, cannot be proven;

¹⁶⁶⁹ So Müller-Lauter, *Nietzsches Lehre*, esp. 12 f., 14 f., 17, 27, 31, 39. Müller-Lauter convincingly refutes Heidegger's metaphysical interpretation of Nietzsche's Will to Power.

¹⁶⁷⁰ See above note 356.

¹⁶⁷¹ Salaquarda, *Nietzsche und Lange*, esp. 245, 247.

¹⁶⁷² Stack, *Lange und Nietzsche*, esp. 112 ff., 195 ff.

practically functioning and useful, indeed vital knowledge thus has not necessarily, or not at all, to do with truth as *adaequatio rei et intellectus*. This was largely Nietzsche's intellectual yield from the engagement with Lange and (through him) with Kant. Lange's "standpoint of the ideal" interested Nietzsche little,¹⁶⁷³ and Kant's overall position became increasingly unsympathetic to him to the extent that he came to the conclusion that agnosticism cannot achieve the abolition of the separation between this world and the beyond and that the anyway suspicious ascetic trait of Kant's morality was connected with the deeper dualism of Kantian thought; Kantianism appeared therefore in his deepened anti-metaphysical perspective as a variation of the basic pattern of metaphysical thinking, i.e., Platonism.¹⁶⁷⁴ Nietzsche now opposes the unhistorical mode of observation, which connects Kant and Plato among others, with the philosophical demand for a genesis of thought, which should create clarity about the origin and intellectual-historical career of metaphysical (and non-metaphysical) concepts on the basis of pragmatic-functional criteria. The program outlined in the early treatise "On Truth and Lies in a Nonmoral Sense" was concretized in a polemic against the various aspects of the metaphysical concept of truth as well as in an analysis of metaphysics,¹⁶⁷⁵ according to which metaphysics, in order to ground certain values and ethical ideals with ultimate arguments, relocates them into the fixed world of Being, which stands out sharply against the unstable world of becoming; but beyond that, metaphysics interprets the world of becoming with regard to the world of Being, i.e., it introduces fictive magnitudes (such as substance, identity, causality, or the ego) into the world of becoming as fixed reference points and frames, so that metaphysical thought structures permeate all logical and psychological categories or the entire conceptuality supporting human cognition.¹⁶⁷⁶

Precisely this inclusion of categories and concepts, which in themselves have nothing to do with a transcendence in the traditional sense, into the realm of metaphysics suggests the question whether metaphysics as a mode and structure of thought can be overcome or refuted; and if this question should be answered in the negative, then metaphysics must be regarded as anthropologically conditioned, even if not a subjective and conscious human need, but an objective anthropological necessity drives toward it. Nietzsche himself noted how strong the effect of the metaphysical need remains, since even free spirits develop longings for immortality, union with the All, etc., through artistic experiences.¹⁶⁷⁷ He turned against a superficially condescending settlement with metaphysics, which would misjudge the "historical

¹⁶⁷³ See the justified objections of Ansell-Pearson against Stack's attempt to identify Nietzsche's and Lange's standpoints completely (*The Question of Lange's Influence*, esp. 549 f.).

¹⁶⁷⁴ On this Ansell-Pearson, *Nietzsches Overcoming*, esp. 333 ff.

¹⁶⁷⁵ On this Hilpert, *Die Überwindung*, esp. 95 ff., 104 f.

¹⁶⁷⁶ On this Granier, *Problème*, esp. 58 ff., 65 ff., 93 ff.; cf. Djurić, *Nietzsche*, 16 ff.

¹⁶⁷⁷ *Menschliches, Allzumenschliches*, I, § 153 = *Werke*, I, 548.

and psychological justification" of metaphysical ideas as well as their constructive role in the advancement of humanity.¹⁶⁷⁸ Now, however, he went a step further and spoke not merely of this indeed promoting, but with regard to the whole historical development of man perhaps only temporary influence of metaphysics, but also—repeatedly and unmistakably—of its downright constitutive significance for human speech and thought in general, i.e., without regard to a division of history into the epoch of the dominance of metaphysics and that of its final decay. Developmental-historical observation shows him that beings who did not see the reality of becoming exactly, but committed metaphysical errors, had an advantage over those who could perceive becoming, i.e., reality and only this; the conclusion from this was that we, after we have arranged a world for ourselves with the help of such ideas as bodies, causes, effects, etc., in which we can live, could no longer endure life without these "articles of faith".¹⁶⁷⁹ When he remarked in his late work that language is built upon the "most naive prejudices" and must therefore produce metaphysical errors, he added that we would cease to think if we did not want to do it in the linguistic constraint.¹⁶⁸⁰ And when he pointed to the metaphysical "nonsense" of deriving the conditioned from the unconditioned, he meant subsequently that it belongs to the "nature of thinking" that it "thinks the unconditioned in addition to the conditioned, invents it in addition," and forms concepts like Ego, substance, purpose, means, etc., without which no knowledge would be possible.¹⁶⁸¹ Nietzsche's difficulty is obvious: he first established the indispensability of fictions for knowledge and then the indispensability of this knowledge based on fictions for the struggle for existence of the species, thus for the unfolding of the Will to Power; at the same time he realized that precisely these vital fictions are metaphysical in their essence or must underlie every metaphysics. The logical conclusion from these premises would have to be that metaphysical thought structures—regardless of whether they had a beyond as content or not—could not be dispensed with without severely impairing the ability to orient oneself and condemning the Will to Power, which is supposed to be the absolute anthropological constant, to impotence. It is a contradiction, on the one hand, to demand insight into the fictivity and conventionality of conceptual creations and of knowledge in general, and on the other hand to emphasize that "every skeptical tendency constitutes a great danger for life".¹⁶⁸² For skepticism arises not least from that insight—and accordingly fiction and lie are not arbitrary, but only usable in the sense of the Will to Power if they believe of themselves that they are ultimate and immovable truths: precisely for this reason

¹⁶⁷⁸ *Loc. cit.*, I, § 20 = *Werke*, I, 462.

¹⁶⁷⁹ *Die fröhliche Wissenschaft*, §§ 111, 121 = *Werke*, II, 119, 124.

¹⁶⁸⁰ *Wille zur Macht*, § 522.

¹⁶⁸¹ *Loc. cit.*, § 574.

¹⁶⁸² *Die fröhliche Wissenschaft*, §§ 111 = *Werke*, II, 119.

metaphysics must, as Nietzsche himself writes, deal with the fundamental errors of man as if they were fundamental truths.¹⁶⁸³

If Nietzsche polemicizes so violently against illusions despite the declared assumption of their necessity for life, as if they were not necessary for life, he unintentionally falls victim to the rationalistic-normativistic prejudice that there could be a state in which the unconscious symmetry between false consciousness and practical efficiency could be replaced by the consciously striven-for correspondence of true insight and practical efficiency. And he falls victim to this prejudice because in his analyses of the metaphysical mode of thought he has a counter-ideal in the back of his mind—and not only there—which commands overcoming and a new beginning. In the light of this counter-ideal, the basic concepts he based those analyses on receive a double dimension or a "true" and a "false" sense. Thus a distinction is made between the morbid Will to Power of priests and metaphysicians, which is practically reflected in ascetic commandments and the like and thus falsifies "life," and the genuine Will to Power, which knows itself in joyous agreement with the innocence of becoming (to this corresponds the double, negative and positive use of the concept of nihilism: nihilism as ascetic denial of life and nihilism as radical questioning of the values carrying this denial in the name of an innocent Will to Power). Here again Nietzsche overlooks that just as lie and fiction must disguise themselves in truth in order to be practically efficient, so too the striving for power must appear not naked, but most effectively as a call to the renunciation of power, thus as a call to asceticism, to modesty, and to moral conduct of life, if it wants to be successful in the long run. Moral ideals are no less indispensable as unfolding and at the same time crystallization of the Will to Power than cognitive fictions—metaphysics is thus confirmed in both its dimensions. Nietzsche, who as a representative of a counter-ideal wants to overcome both of these dimensions, not only notes their inner connection in the thought structure of traditional metaphysics, but also adopts it for polemical reasons into the philosophical design of his counter-ideal and thinks the new morality of the Superman, i.e., the innocent unfolding of the Will to Power, should be underpinned by the doctrine of Eternal Recurrence, which he opposes to the Christian or Christian-inspired idea of progress together with its moral implications. Through this attempt at underpinning, which again rests on the prejudice of the possible or desirable symmetry between true insight and right action, Nietzsche has confirmed the indispensability of metaphysics anew—this time not unintentionally in the endeavor to expose the structure of metaphysical thought, but as a representative of a normative view on the "healthy" shaping of human life, which he wanted to ground by ultimate arguments concerning the nature of Being. Through the doctrine of eternal recurrence as "the most extreme approximation of a world of becoming to that of being"¹⁶⁸⁴ he appeared himself as a metaphysician; and to the extent that he connected

¹⁶⁸³ *Menschliches, Allzumenschliches*, I, § 18 = *Werke*, I, 461.

¹⁶⁸⁴ *Wille zur Macht*, § 617.

this doctrine with normative positions and ethical *desiderata*, he proved by his own example that metaphysics cannot be overcome as long as the metaphysics critic does not renounce his own normative positions and counter-ideals, i.e., as long as he does not affirm the necessity of illusion for life in its concrete historical forms with ultimate consistency and as long as he does not want to see that even a theoretical overcoming of metaphysics achieved in this way can have no practical significance.

The conception of the metaphysical need of man has significantly clearer and at the same time simpler outlines in Dilthey. For Dilthey distinguishes this need in its imperishability from all historically attested and conditioned forms of metaphysics, which had to perish finally after the rise of the positive sciences. This distinction was in turn possible in this clarity because Dilthey understood by metaphysics not the turning of human thought to the transcendent in general, but exclusively the philosophical attempt to recognize the world context in its unity and its essence rationally; spoken Aristotelianly, metaphysics was to him not theology, but *prote philosophia* or science of the grounds not further conditioned in the process of knowledge.¹⁶⁸⁵ Metaphysics, to be sure, feeds from several spiritual sources which are to be found among the ancient peoples and flow on mixed or side by side in Christianity,¹⁶⁸⁶ it is prepared by religion and influenced by poetry—but it arises as such only where reason raises the claim to bring the worldview into a conceptual context with rational means. For this reason, there exists from the beginning a close relationship between it and the current state of scientific knowledge, at the same time it intertwines with the contemporary secular culture, on whose respective constitution its own form depends. Thus metaphysics is knowledge of reality, appreciation of life, and setting of goals in one—an inner multiplicity that calls into life and promotes the conflict of systems, since this is founded in the difference of life experience and the attitude toward the problem of life.¹⁶⁸⁷ The unavoidable reference of metaphysics to the world of culture, i.e., to the manifold human reality of the will and feeling, places a first heavy obstacle in the way of its rational claim to knowledge, for that "which is given in the totality of our essence can never be wholly resolved into thoughts." Nevertheless, its recognition as the queen of the sciences remained unchallenged as long as the belief existed that reason could subordinate reality as a whole to the law of cognition. Precisely this belief was shaken by the rise of the modern sciences, finally bringing about the dissolution of metaphysics. As a critic of metaphysics, Dilthey largely joins the argumentation of Enlightenment-positivist as well as Kantian agnosticism and phenomenalism. He emphasizes above all the limits of human cognitive faculty, as a result of which thought can neither unambiguously determine the bands of the metaphysical world context (it uses the concepts of substance or causality like mere aids

¹⁶⁸⁵ *Ges. Schriften*, I, 127 ff., esp. 130–132.

¹⁶⁸⁶ *Loc. cit.*, 1 ff.

¹⁶⁸⁷ *Loc. cit.*, VIII, 94 ff.

or signs for an X), nor prove its content-related conception of the essence of this same context. Since nothing can be known in nature and society if no correspondence to the facts of consciousness exists, metaphysics does not overcome the relativity of the circle of experience and the subjectivity of psychic life. In its final phase, it transforms into epistemology, which means "euthanasia" for it. Its attempt to conclude the results of the sciences in a general world view can have only modest success, and the diversity of systems that arises precisely in the time of its decline shows the relativity and arbitrariness of late metaphysical thought. For it is here merely a matter of the subjective expression of significant personalities with universal claims to knowledge, and the endeavor to pick out the true one among these systems would spring from a "peculiar superstition".¹⁶⁸⁸

Traditional metaphysics cannot now be replaced by any newer human science; on the contrary, sociology or philosophy of history fall victim to the metaphysical error insofar as they attempt to arrange phenomena into a unified logical context which by their nature resist such a reduction.¹⁶⁸⁹ The longevity of metaphysics is explained by the fact that it was nourished by the "totality of the emotional powers",¹⁶⁹⁰ and precisely for this reason its final collapse as a science of reason cannot entail the death of the metaphysical. The unconditioned, around which religion and metaphysics revolve, belongs to the total reality of the spirit;¹⁶⁹¹ therein is grounded the imperishability of the "metaphysical consciousness" regardless of the variety of conceptual or religious symbols through which it expresses itself in historical reality. After metaphysics as a science of reason has become untenable, this "higher consciousness" is recognized in its independence and autonomy, namely as that which has overcome the sterility of doubt and produced the great things in history. Ideas such as that of the soul or the personal God, moral-religious truths in general, do not spring from reason, but from inner experience or the metaphysical that is alive in inner experience. After the collapse of metaphysics, as already during the Reformation, the hour of the liberation of "metaphysical consciousness" from its unnatural rational fetters comes, and the self-reflection that dissolves metaphysics finds in its depth once again—"religious experience".¹⁶⁹² By standing up for the rights of metaphysical consciousness after the downfall of rational metaphysics, Dilthey wants to defend the totality of the human against its empiricist-positivist truncation, i.e., to prevent the elimination of the old transcendence from causing an impoverishment or dilution of the content of the world of experience. At the same time, however, he must no longer conceive the religious as transcendent objectivity, but exclusively in its this-worldly relevance and effect, i.e., as a component of the

¹⁶⁸⁸ *Loc. cit.*, I 395 ff. 125, 358 f.

¹⁶⁸⁹ *Loc. cit.*, 93 ff.

¹⁶⁹⁰ *Loc. cit.*, 359.

¹⁶⁹¹ *Loc. cit.*, VIII, 175 f.

¹⁶⁹² *Loc. cit.*, II, 496, 498; I, 384 f., 136.

spiritual richness of human immanent reality. The metaphysical is included in experience, so that the commitment to experience and empirical science, as Dilthey makes it, does not end in skepticism and relativism.¹⁶⁹³ The attempt at a typology of worldviews by reducing them to ultimate experiences or typical constitutions of the soul sprang partly also from the wish to locate fixed points of reference and orientation for the use of modern metaphysical consciousness in the chaotic-seeming diversity of what is historically given.¹⁶⁹⁴

To Kant's disciples, both the anthropological rootedness and the practical-valuable character of metaphysics were self-evident. Their concern, like that of their teacher, was the constant danger of a degeneration of the metaphysical need into nebulous speculations. Therefore, they demanded its channeling and at the same time its purification, so that it would not have to come into conflict with the spirit of a scientific age. Under the influence of the metaphysical "natural drive," wrote Lange, man attempts to break through the barriers of knowledge and to supplement reality with an ideal world, whereby "the highest and noblest functions of his spirit work together in such creations." In order to satisfy this natural drive without again falling victim to the old delusions, metaphysics must cease to vie with science and concentrate its effort on the Ethical; in this effort it might meet with religion, which for its part should "spiritualize" itself and place itself together with metaphysics under the "standpoint of the ideal".¹⁶⁹⁵ Healthy metaphysics thus forms the summit of the ethical demand, it is projection or intensification of ethical postulates and not, conversely, a doctrine of being from which ethical postulates are deduced. Cohen even opined that (traditional) metaphysics makes the grounding of ethics on the basis of autonomy impossible. For it grows on the soil of pantheistic mysticism, i.e., it assumes an essential equality of God and man, will and intellect, and thus it necessarily denies the *principium individuationis*, the reality of free will and the "idealism of self-legislation"; identity is correct for logic according to Cohen, but for ethics it becomes a "snare".¹⁶⁹⁶ Mythology, religion shaped by mythology, and metaphysics belong together; their common basic theme is the fate of the individual, his eternal salvation or his eternal damnation—but none of them is compatible with ethics, but only pure religion, which holds fast to the purified idea of God as a bridge between nature and morality.¹⁶⁹⁷ The extent to which religion or metaphysics should be purified of "mythology" in order to satisfy the commandments of autonomous practical reason remained, however, mostly unclear among the Neo-Kantians, partly due to the nature of the matter, partly out of the fear of many bourgeois representatives of the movement that they could drive the break with established religion too far and thus

¹⁶⁹³ Cf. Degener, *Dilthey*, 21 ff., 29 ff.

¹⁶⁹⁴ Cf. Frischeisen-Koehler, *Phänomenologie*.

¹⁶⁹⁵ *Geschichte*, II, 672 ff.

¹⁶⁹⁶ *Ethik*, 210, 106 f., § 13, 435; cf. 18 ff. (against Schopenhauer's metaphysics).

¹⁶⁹⁷ *Loc. cit.*, 44, 440 f.; cf. *Begriff*, 137.

compromise themselves socially and ideologically. In any case, it seemed safe to offer ethically grounded metaphysics as the best possible "bulwark" of religion under the given circumstances—i.e., in view of the danger of spreading scientism and materialism¹⁶⁹⁸—and then to use this service to religion as a certificate of loyalty in order to be allowed to raise more or less moderate reformist demands. Nevertheless, it had become increasingly difficult to stand up for God, freedom, and immortality as an inseparable unity with the same conviction as Kant himself in a substantially different time. Thus, sometimes freedom of will was emphasized much more strongly than God or immortality, while the Absolute was identified with the idea of moral perfection and, as the cause of forms of existence, was denied consciousness and will, though not moral character.¹⁶⁹⁹

The value-laden character of metaphysics was immediately plausible to the Neo-Kantians because they kept in mind Kant's practical grounding of metaphysics, which was nothing other than grounding it on the basis of certain ethical values. Windelband referred to Kant and his view that only practical reason "realizes" the supersensible when he called metaphysics a "hypostatization of ideals" and noted that practical motives are already effective in the general formulation of the problem, which demands the search for actual reality.¹⁷⁰⁰ The ideal here can be a demand of value consciousness as well as of conceptual thinking—in both cases, true and pure Being is what it ought to be and what it can never be in empirical reality; precisely this "dissatisfaction of the spirit" with the given motivates the search for the Higher and connects metaphysical need and basic religious feeling.¹⁷⁰¹ Rickert formulated the same thought succinctly by noting that highest reality and highest value coincide in metaphysics. The concept of the real obviously has a different sense here than in the sensuous world, and only by including the valuable in the real is metaphysics able to interpret the meaning of the world and life in such a way that it becomes philosophically interesting. No pure science of reality would be suitable for such purposes, and a value-free metaphysics would hardly find adherents. In the metaphysics known to us, the value problem precedes the metaphysical reality problem; the objectivity of values is presupposed and, since values obviously do not fully realize themselves in the sensuous world, the place of their absolute and permanent validity is relocated to true Being, which is conceived accordingly. Through this, however, metaphysics cannot detach itself from the sensuous world; its concepts are formed on the basis of material offered by physical and psychic reality and are actually symbols, images, or parables; without a this-worldly Being, there is no metaphysical conception of the Beyond.¹⁷⁰²

¹⁶⁹⁸ Arnoldt, *Metaphysik*, esp. 171 f.

¹⁶⁹⁹ See e.g. Liard, *Wissenschaft*, 282 ff., 348, 349.

¹⁷⁰⁰ *Einleitung*, 35, 34.

¹⁷⁰¹ *Loc. cit.*, 38, 33.

¹⁷⁰² *System*, I, 138 ff.; *Grundprobleme*, 143 ff.

The Kantian view of the rootedness of metaphysics in ethics or in the value problem could easily transition into a sociological and historical analysis of the metaphysical phenomenon under the influence of the social sciences which were just then powerfully unfolding: the world of ethics and values is the world of action, and action can be defined in a very broad sense, i.e., in its relation to the various cultural areas. There was no lack of hints in this direction among the Neo-Kantians, e.g., when Windelband noted the religious, ethical, and aesthetic "inclusion in the web" of metaphysical systems as well as the fact that metaphysics has always taken its motives "from the entire circumference of culture";¹⁷⁰³ Rickert meant the same when he wrote that through the analysis of "worldview motives" we could understand metaphysicians better than they sometimes understood themselves.¹⁷⁰⁴ Nevertheless, the Neo-Kantians did not want to let their own philosophy become "a ragout gathered from psychological and cultural-historical waste",¹⁷⁰⁵ and accordingly the direction of their metaphysics critique remained bound to their positive philosophical program, which provided, besides epistemological and gnoseological tasks, for a grounding of ethics and value theory beyond any sociological and historicist relativism. There were, however, attempts to build bridges between Kant and Dilthey. Liebert, in his psychological analysis of metaphysics, placed the mentioned intertwining of the question of Being and Value in the center¹⁷⁰⁶ and interpreted Kant's definition of metaphysics as a system of reason to mean that reason encompasses all cultural areas, so that metaphysics must become the science of the foundation of culture. The forms of reason are not rigid entities, but "living, free functions" with exclusively systematizing validity, and an achievement of post-Kantian idealism consisted in having dynamized the concept of reason and brought it close to the living organism of values or culture.¹⁷⁰⁷ Liebert, who praises Dilthey profusely so that his declaration of distancing from him does not appear sufficiently grounded,¹⁷⁰⁸ does not, however, ask himself the question of how reason can be historicized without having to give up its validity claim understood in the Kantian sense. Metaphysics may, as Liebert thinks, express the tragedy of the eternal struggle to overcome antinomies deeper and more intensely than any other cultural formation,¹⁷⁰⁹ but for this special reason it does not have to be a system of reason in the above sense.

The Neo-Kantians had not forgotten that Kant traced the metaphysical need not only to the (fulfillable) demands of practical reason but also to the (unfulfillable) wishes of theoretical reason. Mindful of this, some followers of Vaihinger sought to establish a connection between

¹⁷⁰³ *Einleitung*, 34.

¹⁷⁰⁴ *System*, I, 139.

¹⁷⁰⁵ Thus Windelband, *Präludien*, 51.

¹⁷⁰⁶ *Zur Psychologie*, esp. 49, 50.

¹⁷⁰⁷ *Wie ist kritische Philosophie...*, esp. 57 f., 189 ff., 207 ff., 212.

¹⁷⁰⁸ *Geltungswert*, 33 ff.

¹⁷⁰⁹ *Loc. cit.*, 18 f., 56 ff.

the two spiritual sources of metaphysics and the double—theoretical and practical—character of vital fictions of metaphysical origin.¹⁷¹⁰ Lehmann also spoke of two different drives in his psychological discussion of the metaphysical need. These are, on the one hand, curiosity, which sets itself absolute knowledge as a goal regardless of its verifiability by experience, and on the other hand, emotional impulses set in motion by the riddle and expectation of death, by wonder at the existence of the world, or by egoistic or altruistic motives.¹⁷¹¹ The method of metaphysics, i.e., the analogical inference from the empirical to the non-empirical, is likewise applied to two areas and in two ways, corresponding to the two sources of the metaphysical need: curiosity, which is active in the field of science, designs mathematical, psychological, etc. hypotheses and develops from them total interpretations of the world, while the emotional component of the metaphysical need flows into religion and interprets the world on the basis of religious conceptions like God, etc.¹⁷¹²

In the (Neo)Kantian perspective, the assertion of the metaphysical need of man was connected with the warning against the metaphysical aberrations of theoretical reason. Scheler, on the contrary, wanted to derive from that assertion the possibility of a metaphysics as a science of reason, with the argument that it would be "a unique disharmony ... if man possessed an incomprehensible inclination to form convictions whose truth and falsity he himself never had the powers to see." If metaphysics is "essential" to the human spirit, then "relativists," among whom Scheler counts positivistically and Neo-Kantian oriented metaphysics critics, also have a metaphysics anyway, and the only question is whether it is a matter of a "good or bad ..., conscious or unconscious, self-found or traditional" one.¹⁷¹³ The ineradicable anthropological root of metaphysics lies in the act of wonder and the feelings accompanying it; if this wonder concerns the existence and essential structure of a world totality and drives the search for a *causa prima* beyond all *causae secundae*, then it is metaphysical.¹⁷¹⁴ While those who saw in the metaphysical need the possible source of empty speculations regarded metaphysics and religion (as well as mythology) as essentially related, Scheler wants to ground the rational claim to knowledge of the former through a clear separation between metaphysics and religion. Metaphysics springs from wonder, religion is grounded in the love of God and the desire for salvation; the question of salvation, however, remains secondary for metaphysics, just as the knowledge of the absolutely Real cannot be the primary question for religion. Although the question of Being and the question of salvation are intertwined, since the salvation or damnation of all things depends on the essential peculiarity of the absolutely Real, and also

¹⁷¹⁰ Goedeckemeyer, *Über Metaphysik*, esp. 88 f.; cf. Vaihinger, *Philosophie des Als-Ob*, esp. 68 f.

¹⁷¹¹ *Psychologie*, 42 f., 45 ff.

¹⁷¹² *Loc. cit.*, 53 f., 55 ff., 60 ff.

¹⁷¹³ *Weltanschauungslehre*, GW, XI, 17.

¹⁷¹⁴ *Die Wissensformen...*, GW, VIII, 66.

although metaphysical and religious predications refer equally to the *Ens a se* as the ultimate logical subject, the latter is nevertheless conceived substantially differently by metaphysics than by religion.¹⁷¹⁵ Scheler admits the value-laden character of the categories of Being of ancient-Christian metaphysics, he regrets their subjectivization in the modern age and thinks that psychologically explained values would be of no significance for metaphysics. Metaphysics must make values understandable from the world ground, it is knowledge of reality and theory of absolute values at the same time, and in this respect also a "way of salvation"—but unlike religion, it requires neither faith nor supernatural sources of knowledge, but rests on evident knowledge and shares a rational methodology with science.¹⁷¹⁶ Religion and metaphysics have also developed separately from and parallel to each other in history, after differentiating themselves from the common preliminary stage of natural- and historical-mythical thinking, at which they were still intertwined with the positive knowledge of the time. It is Comte's error to let metaphysics emerge from religion and positive science from metaphysics; in reality, it has long been a matter of three separate developments, as shown, among other things, by the increasingly strong modern antagonism between religion and metaphysics.¹⁷¹⁷ On the other hand, not only religion but also metaphysics suffered considerable setbacks as a result of socio-political transformations in the modern age, so that it finally became a personal system and its respective representative a solitary thinker. Nevertheless, Scheler saw, on the basis of the "persistently acting metaphysical need," a "newly rising metaphysical age" coming, whose harbingers and symptoms he attempted to register.¹⁷¹⁸

One may also speak of a metaphysical need of man within the framework of Heideggerian philosophy, provided that we leave aside the specific (negative) meaning of the term "metaphysics" in Heidegger and understand by metaphysical need that human attitude which is conditioned by the essential relation of man to Being and leads to Being itself "becoming worthy of thought for man." To grasp the essence of man in this way, however, we must pose the question of the truth of Being, that is, overcome the standpoint of traditional metaphysics, which can only think beings and therefore can also regard man merely as a being among others. If, on the contrary, we view man from Being, then we perceive his essence in *ek-sistence*, i.e., in his "ecstatic standing in the truth of Being" or in the exclusive property of Dasein to represent the clearing of Being.¹⁷¹⁹ If, after the future downfall of metaphysics completed in technology, a (difficult) new beginning is expected,¹⁷²⁰ the driving force for this must be surmised in the thus

¹⁷¹⁵ *Vom Ewigen im Menschen*, GW, V, 134, 135.

¹⁷¹⁶ *Weltanschauungslehre*, GW, XI, 54 ff., esp. 60, 62; *Die Wissensformen...*, GW, VIII, 87.

¹⁷¹⁷ *Die Wissensformen...*, GW, VIII, 29, cf. 155, 163; see also *Vom Ewigen im Menschen*, GW, V, 294 ff.

¹⁷¹⁸ *Die Wissensformen...*, GW, VIII, 166 f. (cf. 175 f.), 146 ff.; on the sociology of metaphysics cf. also 86 ff.

¹⁷¹⁹ *Platons Lehre*, 64 ff.

¹⁷²⁰ *Überwindung*, 73.

understood rootedness of man in Being, which might one day awaken the corresponding consciousness and thereby exert a salutary influence on the conduct of life of people on earth. Heidegger has no explanation to offer for the fact that metaphysics has been able to conceal the truth of Being for so long and so effectively; he also does not know how to say whether the aberration of the "occidental spirit" arose necessarily or accidentally. In any case, it is to be assumed that the essential relation of man to Being persists under the rule of metaphysics, although it was not recognizable with the conceptual means of the latter. For what metaphysics conceals or disguises cannot be just any arbitrary thing, but only Being itself, which it thinks in the beingness of beings, without being able to consider its truth.¹⁷²¹ Precisely because metaphysics conceals *Being*, thinking that wants to go beyond metaphysics must go back into the ground of metaphysics and make the discovery that the essence of metaphysics is something other than metaphysics itself.¹⁷²² A remnant of the philosophical linguistic usage of the 1920s, when one spoke of the metaphysical need of man *ad nauseam*, is found in Heidegger's early terminology, e.g., in his statement that metaphysics is the basic occurrence in Dasein or Dasein itself.¹⁷²³ The later exclusively negative use of the metaphysics concept in connection with the demand to go back into the ground of metaphysics had to call forth an ambiguity that was not merely terminological. Heidegger himself thought this ambiguity had to do with the character of a questioning that had to think metaphysically and at the same time from the ground of metaphysics, i.e., no longer metaphysically.¹⁷²⁴ In any case, there is a close and openly admitted connection between the determination of the essence of man and the metaphysically-"representational" or, conversely, the non-metaphysically-"essential" character of his thinking.¹⁷²⁵ If man is defined as *animal rationale*, then metaphysics belongs to his nature; if, on the contrary, the return into the ground of metaphysics succeeded, this would have to call forth a change in the essence of man and at the same time a transformation of metaphysics.¹⁷²⁶

The view of the metaphysical need asserted—incidentally following Kant—that the irrepressibility and inevitability of metaphysical questions lie in the formal manner of questioning, i.e., human thought cannot help but pose questions in the context of its endeavor to know experienceable things that exceed the jurisdiction of experience.¹⁷²⁷ It remains unclear, however, how far this so-understood metaphysical need is prepared to go, whether namely it wants to land at transcendence metaphysics or be content with an immanence metaphysics. One can observe that most who appealed to the metaphysical need or at least the logically

¹⁷²¹ *Was ist Metaphysik?*, 44.

¹⁷²² *Loc. cit.*, 9.

¹⁷²³ *Loc. cit.*, 41.

¹⁷²⁴ *Loc. cit.*, 41; cf. *Einführung*, 15.

¹⁷²⁵ See above notes 329, 381.

¹⁷²⁶ *Was ist Metaphysik?*, 9.

¹⁷²⁷ Risse, *Metaphysik*, 17.

understood metaphysical necessity thought of the transcendent. A sober, almost prosaic example of this case was Sigwart, who as an agnostic accepts no proofs *in metaphysicis*, but on the other hand wants to derive metaphysics from the "demands of our thinking." These demands are both cognitive and volitional-ethical, and the content of the sought metaphysics must turn out accordingly. If we wanted to satisfy merely the cognitive thought demands, we would be allowed to grasp Being strictly causally and deduce everything particular from a ground with logical necessity. The blind thought of necessity, however, cannot satisfy ethical volition, and therefore the causal consideration must recede before the teleological one, which alone is capable of bringing thinking and willing, (knowledge of) necessity and (wish for) freedom to a common denominator. The idea of God is intended here to guarantee the ideals which float before our thinking and willing.¹⁷²⁸ Obviously, a God who is extracted from the "principles of methodology" must appear quite cold and colorless. Much more committedly, existentialists derive their transcendence from the metaphysical need, even if, like Jaspers for instance, they admit that the Absolute is not knowable and cannot represent an object of knowledge. Therefore, practically only that is of interest "which could be the Absolute for man." Based on his "structure of spirit," man is "psychologically" forced to reach for the Absolute as for a place where he must inevitably put something, even if it be Nothingness or the denial of the Absolute. The metaphysical need can be satisfied in the most varied ways under these circumstances, for the relationship to the Absolute takes not only philosophical but also mythical and theological form; apart from that, the resulting constructions can be structured monistically, dualistically, or hierarchically.¹⁷²⁹ This observation constitutes at the same time an admission that no metaphysics with binding content can be established on the mere basis of the assumption of the metaphysical need.

We explained that the polemic against Neopositivism amounted to a defense of the usefulness, utility, or even indispensability of metaphysical assumptions for scientific purposes.¹⁷³⁰ The representatives of this position generally dispensed with its anthropological underpinning, i.e., they argued pragmatically and did not explicitly say that metaphysical assumptions were an absolute need or an absolute demand of thought, although hints in this sense were not lacking. It is clear, in any case, that they thought of an immanence metaphysics, that is, of super-empirical hypotheses for explaining the empirical without recourse to transcendent entities. The necessity or inevitability of the metaphysical understood in this way had, of course, been emphasized much earlier, for example by Simmel, who counted all theories about the meaning and purpose of history as metaphysics and simultaneously traced their origin to the methodologically conditioned fact that there can be no shaping of historical material without an

¹⁷²⁸ *Logik*, II, 770 ff., 763 f.

¹⁷²⁹ *Psychologie*, 161 ff.

¹⁷³⁰ See above Sect. IV, 3, in this chapter.

idea of the meaning and significance of the "whole" that is transcendent to it. Accordingly, all views of history contain metaphysical presuppositions, regardless of whether these come to the fore or not. Metaphysics exists where sensuous externality (particular) is traced back to a spiritual principle (a general). Although the transition from the particular to the general can have no epistemological justification, (contradiction-free) metaphysics nevertheless fulfills its task sufficiently, since this consists not at all in the correct knowledge of the objects concerned, but rather in satisfying "the most manifold drives and interests of action as well as of feeling" in a symbolic way or by activating a symbol-creating play drive intertwined with it.¹⁷³¹ Mannheim, likewise a sociologist with considerable philosophical education, expressed himself on the necessity of metaphysical assumptions first in the framework of his earlier investigations into the structure of epistemology, which is always formed against the background of a metaphysical attitude held to be self-evident and not further thematized.¹⁷³² In a polemic against the "self-deceptions" of positivism, which itself rests on certain metaphysical assumptions and yet wants to know nothing of metaphysics, Mannheim generalized his early findings and opined that knowledge cannot do without metaphysics and ontology, and indeed for organic and insurmountable reasons; for "human thinking" is so "structured that it must always posit Being somewhere and accordingly a sphere as absolute." The inevitability of metaphysics did not, however, mean for him a confession to traditional metaphysical speculation, which he, in agreement with the positivists, considered definitively finished; the function of a metaphysics of immanence could, in his view, be taken over by historicism.¹⁷³³

Since then, the view has often been expressed that metaphysics and thinking activity as such belong together and that therefore metaphysics does not have to have a transcendence as its object, but can just as well devote itself to the study of human affairs.¹⁷³⁴ The permanent necessity of metaphysics is derived, however, not only from the assumed unalterable nature of human cognition and thought. Its emergence also appears necessary in a world where suffering, conflicts, and insecurity are the order of the day and accordingly liberation and relief are sought in utopian designs; seen in this way, the metaphysical need turns man into a being that is to be called utopian.¹⁷³⁵ In both cases, i.e., regardless of whether metaphysics is grounded in the structure of human cognition and thought or grows out of the conflict-ridden and compensation-needing *situation humaine*, it wants to assert itself after the collapse of transcendence (metaphysics). Metaphysical thought structures thus live on independently of transcendent or immanent thought content, and one may not speak of an overcoming of

¹⁷³¹ *Probleme*, 84, 86, 100, 104, 105.

¹⁷³² *Die Strukturanalyse der Erkenntnistheorie = Wissenssoziologie*, 197 f.; cf. *Historismus*, loc. cit., 280 f.

¹⁷³³ *Das Problem einer Soziologie des Wissens*, loc. cit., 329 f.; *Historismus*, loc. cit., 299 f.

¹⁷³⁴ See e.g. Bogliolo, *Positività*, esp. 54.

¹⁷³⁵ Rauche, *Utopie*, 8, 15, 18.

metaphysics, which would even be a self-overcoming of philosophy, just because this or that philosopher declared metaphysics as a science of reason of the transcendent to be impossible and devoted himself to religion or poetry.¹⁷³⁶ The question of the existence and effect of metaphysical thought structures is not exclusively philosophical, it also weighs heavier than the self-understanding of (professional) philosophy. At the end of this investigation, we want to briefly explain why this is so.

¹⁷³⁶ Cf. Schweidler, *Die Überwindung*.

5. Concluding Remark

Since the Enlightenment, the decline and death or, conversely, the survival and inexhaustible power of metaphysics have been repeatedly noted, whereby diagnosis and pious prognosis could not be separated from one another. Whether these diagnoses and prognoses turned out in favor of metaphysics or against it, common to them was the undifferentiated talk of "metaphysics" and the overlooking of the diversity of actual, historically attested linguistic usage. Behind this usually lay the will either to identify metaphysics in general with one's own metaphysical position and protect it from any "falsification," or to chalk up metaphysical aberrations exclusively to the intellectual opponent and thereby acquit oneself of them. The reduction of metaphysics in general to a specific type of metaphysical thinking has thus served normative conceptions of the tasks of intellectual activity and polemical intentions. Descriptively, the question of the life or death of metaphysics cannot be answered if we do not keep in mind the entire spectrum of intellectual-historical phenomena that were respectively called "metaphysics," without wanting to fixate on an allegedly "genuine" concept of metaphysics; in this we see ourselves incidentally confirmed by the finding that the ambiguity in the matter and in the nomenclature has existed since Aristotle, growing in the modern age only as a result of the pressure under which traditional metaphysics came. From this perspective, it is striking that the concept of metaphysics survives transcendence metaphysics effortlessly and has even experienced an (epistemological) revival on the soil of a godless immanence in recent decades. The binding of the concept of metaphysics to transcendence in the sense of the old Beyond or "real Being" is thus not obligatory or constitutive—obligatory and constitutive, however, remains its binding to the Super-empirical, i.e., to that which cannot be directly found by any (sensuous) experience and also cannot be flawlessly confirmed or refuted by any (sensuous) experience, regardless of whether it concerns God, a world formula, or general theories or hypotheses. The extensive or primary identification of the Super-empirical with the Transcendent or the Beyond was unavoidable for long centuries because transcendence fulfilled normative tasks. From the moment when inner-worldly authorities took over not only *de facto* but also nominally the determination of norms intended to regulate social life, the old transcendence had to fall away or wither. If, nevertheless, the appeal to the Super-empirical continues to be claimed undiminished and is very often (i.e., whenever this appears expedient or indicated due to the concrete polemical constellation) called "metaphysics," it must have causes that lie deeper than the (provenly neither ubiquitous nor socially indispensable) longing for the Beyond.

Super-empirical statements are made either to ground norms and values or to establish theories (whether scientific or not) with a claim to general validity. In both cases, it concerns statements that by their nature articulate a claim to power, even if this appears more clearly in normative

statements: whoever represents and recommends norms obviously wishes for the adaptation of other people's behavior to his own value conceptions, which are of course always passed off as the product of "reason," etc. But also in the field of non-(directly) ethical theory, the power factor is no less decisive—and metaphysics after the collapse of traditional value-laden transcendence has to do primarily with this theoretical field, while ethical reflection in the modern age separated itself in principle from science. Why this must be so and in what way theory must function under these circumstances, I have explained in other works.¹⁷³⁷ Specifically with regard to the problem of metaphysics, i.e., to super-empirical statements, it must be fundamentally stated that without such statements no theoretical generalization on a broad basis and also no interpretation of experience is possible. Interpretation of experience by an interested subject implies *ipso facto* transcending, sifting, shortening, and diluting it, thus subjecting it to those viewpoints in which the power claim of the theoretician as theoretician (i.e., as a member of a community in which identity questions and power struggles are solved or fought out by theoretical arguments) has precipitated for special reasons in a specific situation. This treatment of experience, which belongs essentially to theory, goes hand in hand with the striving for generalization and universality, i.e., for the establishment of a theoretical whole. In this culminates the power claim of the theoretician. For from the perspective of a whole whose ideal axes must be products of worldview decisions, the mentioned subjection of experience to interpretation takes place much more directly and simply. The whole thus becomes the quintessence of a theoretically organized subjective attitude toward the world question—and recourse to the idea of a whole is in turn necessary because ultimate questions can only be answered from the standpoint of the whole; and only he who can answer ultimate questions may hope to enforce his views in theoretical polemics.

With these remarks we touch upon the essence of metaphysical thinking: it concerns that ideal claim to power which manifests itself in the establishment of a theoretical whole on a super-empirical basis—but with the promise to explain all or at least the aspects of experience deemed central in each case. In this perspective, we need not note, prophesy, or lament the death of metaphysics: the claim to power by which it lives is just as much or just as little indestructible as the socially living human being himself. Conversely, those who express such findings, prophecies, or complaints should disclose which metaphysics they are talking about. Transcendence metaphysics was a form of it that arose and worked for a long time because it corresponded to the character, needs, and social function of the theoretician stratum carrying it. In modern secularized societies, power claims expressed through super-empirical statements had to seek another space for unfolding as a result of the general worldview revolution, which

¹⁷³⁷ *Macht und Entscheidung*, especially chap. III; with particular consideration of the problem of knowledge (and science) in: *Wissenschaft, Macht und Entscheidung*.

was called immanent out of contrast to the old transcendence; therefore the concept of metaphysics survived the collapse of the latter. Whether transcendence in the old sense will one day come to honor again, we cannot know. Nothing is excluded if we mean by this the possible changes or restructurings of the contents of metaphysical thinking. Only that its source will ever dry up is excluded—that claim to power, namely, which articulates itself as transcendence of experience with a view to the establishment of a polemically effective theoretical whole.

Abkürzungen

AGPh	Archiv für Geschichte der Philosophie
AKG	Archiv für Kulturgeschichte
APhQ	American Philosophical Quarterly
ARG	Archiv für Reformationsgeschichte
ASPh	Archiv für systematische Philosophie
BGPhM	Beiträge zur Geschichte der Philosophie des Mittelalters
BHR	Bibliothèque d'Humanisme et de Renaissance
BSPhS	Boston Studies in the Philosophy of Science
DZPh	Deutsche Zeitschrift für Philosophie
GCFI	Giornale Critico della Filosofia Italiana
GW	Gesammelte Werke
GS	Gesammelte Schriften
HThR	Harvard Theological Review
JHI	Journal of the History of Ideas
JHPPh	Journal of the History of Philosophy
JPh	Journal of Philosophy
KS	Kant-Studien
MSPhS	Minnesota Studies in the Philosophy of Science
NS	Nietzsche-Studien
OC	Oeuvres Complètes
PhJ	Philosophisches Jahrbuch
PhPhR	Philosophy and Phenomenological Research
PhR	Philosophische Rundschau
RCSF	Rivista Critica di Storia della Filosofia
RFNS	Rivista di Filosofia Neoscolastica
RLI	La Rassegna della Letteratura Italiana
RMM	Revue de Métaphysique et de Morale
RPh	Revue Philosophique
RPhL	Revue Philosophique de Louvain
SW	Sämtliche Werke
ZphF	Zeitschrift für philosophische Forschung

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